## **ICOMOS**

# Report on the ICOMOS Advisory Mission to Kizhi Pogost (C 544)

1<sup>st</sup> to 7<sup>th</sup> July 2014





## REPORT ON THE ICOMOS ADVISORY MISSION TO KIZHI POGOST

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## 1. ACKNOWLEDGEMENTS

The members of the ICOMOS Advisory Mission are grateful to the authorities of the Russian Federation for the invitation and assistance they provided for the Advisory Mission to the World Heritage property of Kizhi Pogost. The mission members would like to convey their gratitude to the Russian National Commission for UNESCO, in particular to Mr. Grigory Ordzhonikidze, Secretary-General, for assistance and support.

The mission members also thank the staff and specialists of the Kizhi State Museum-Reserve for the exceptional hospitality, availability, strong communication and valuable information on the current situation of the World Heritage property during numerous working meetings and site visits, and in particular to Mr. Andrey V. Nelidov, Director of the Kizhi State Museum-Reserve, who actively supported and participated in this mission.

## 2. MAIN THREATS IDENTIFIED PREVIOUSLY

The state of conservation of the property has been examined by the World Heritage Committee on 11 occasions since the inscription of the property in 1990. The threats that have been underscored include:

- a. Threats to structural integrity and deteriorated state of the Church of the Transfiguration.
- b. Absence of an integrated management Plan and an operational management system that addresses overall management of the property, tourism management, land use management, management of infrastructure development on Kizhi Island (visitor facilities, artefacts, warehouse, etc.), and establishment of the buffer zone.
- c. Absence of a completed "Statement of Outstanding Universal Value" for the site.
- d. Absence of conservation guidelines and principles to guide consistent decision making regarding reinforcement, treatment of witness marks, and retention or replication of historic fabric and details.

## 3. PARTICIPANTS

Participants in the mission and related meetings and site visits were as follow

Members of the ICOMOS Advisory Mission team:

- Arnt Magne Haugen, ICOMOS, Norway
- Jørgen Holten Jørgensen, ICOMOS, Norway

Participants from the Commission of the Russian Federation ministry of Culture:

• Olga Sevan, Consultant of the "Heritage Institute", PhD in Architecture, ICOMOS member

Participating members of the Supervisory Committee for the Restoration Works on the Church of Transfiguration:

- Tatyana Vakhrameyeva first rank architect-restorer
- Vyatcheslav Orphinsky academic of Russian Academy of architecture and building science, Doctor of Architecture
- Alexander Popov councillor of Russian Academy of architecture and building science, architect-restorer
- Victor Popov architect in the museum of wooden architecture "Vyatoslavitsi", architect-restorer of the highest rank

Vladimir Titov – architect-restorer of the highest rank, member of ICOMOS.

Participants from Museum Administration, supervision & craftsmen:

- Andrey V. Nelidov, director
- Dmitriy D. Lugovoy, first vice director
- Aleksandr Yu. Lyubimtsev, site manager
- Tatyana V. Nezvitskaya, Chief of the security and integrity of historical and architectural complex and landscapes preservation service
- Alexander Kozlov, Manager of the conservation of cultural heritage restoration and monitoring activities service
- Andrey Kovalchuk, Chief carpenter
- Margarita Kisternaya, Senior researcher, PhD (Wood Science)
- Tatjana Kontsevenko, Engineer of the conservation of cultural heritage restoration and monitoring activities service
- Alexander Kuusela, Chief of the conservation of cultural heritage restoration and monitoring activities service
- Vladislav Kuspak, Chief architect
- Olga Titova, Chief of the WHS management service
- Olga Bukchina, WHS management service manager
- Tatyana Brigina, Interpreter
- Alexey Isaev, Interpreter

Participants from the museum invited to the meeting with the interesting parties on July 4<sup>th</sup>:

- Anna Anisimova, Senior lawyer
- Alexander Maksimov, Lawyer
- Irina Pavlova, Deputy Director of the educational and socio-cultural activities of the Kizhi museum

Participants from the companies involved in the restoration:

- Vladimir Rakchmanov, Head architect for the restoration, «Research Institute "Spetzprojectrestavratsija", (St. Petersburg)
- Vitalij Skopin, Head of "ARC "Zaonezhje" company (Petrozavodsk)
- Aleksander Saveljev, Head of "SKF "ALEKON"" company (St.Petersburg)
- Iosiph Rasha, "Strojrekonstruktsija" company (St. Petersburg)
- Jens Kickler, Professor, doctor of the Berlin technical university

## 4. MISSION TERMS OF REFERENCE

The terms of reference for the Advisory Mission were defined based on the results from the 2013 Joint World Heritage Centre/ICOMOS Reactive Monitoring Mission to the property (Annex H), and in accordance with Decision 37 COM 7B.80 adopted by the World Heritage Committee at its 37<sup>th</sup> session (Phnom Penh, 2014) (Annex I)

The mission carried out by ICOMOS from 1 to 7 July 2014 was an advisory mission, with the main goal of advising the State Party and the Kizhi Museum. However, its recommendations are intended to be consistent with the previous decisions made by the World Heritage Committee and with recommendations made by the World Heritage Centre and ICOMOS during the reactive monitoring missions, consequently

this report should be read in conjunction with this documentation, in particular the 2013 Reactive Monitoring mission report.

The main focus of this Advisory Mission was the technical aspects of the conservation project on the Church of the Transfiguration, particularly the completion of repairs to the log work of the 4<sup>th</sup> and 5<sup>th</sup> tiers and the reassembly of the 5<sup>th</sup> and 6<sup>th</sup> tiers. In relation to the reassembly of the latter two, the focus was especially on the needs and possibilities related to proposed additional supporting structures. Furthermore, the entrance zone of the property became a topic for discussion as new constructions have been built there recently.

The mission experts found they needed to spend additional time in the Church, in order to get a better overview on the current state and issues at stake. Due to time restrictions, some aspects mentioned in the Terms of Reference received less attention than originally planned. For subjects where there are no recommendations from this Advisory Mission, the recommendations made by the April 2013 Reactive Monitoring mission stand.

## 5. MISSION REPORT AND RECOMMENDATIONS:

## 5.1 Review of the restoration works in the Church of the Transfiguration

## 5.1.1 Status of the restoration project

At the time of the 2013 reactive monitoring mission (1-6 April 2013) the seventh (lowest) tier of the church had been reassembled in the building, while the 6<sup>th</sup> tier had been removed and was being repaired in the workshop. Since then, there has been considerable progress, and at the present time (1-7 July 2014) the 6<sup>th</sup> and half of the 5<sup>th</sup> tier have also been repaired and reassembled in the building. The 4<sup>th</sup> tier has also been removed from the church, and it is now in the carpenters' centre, fully restored and temporarily assembled inside the restoration hall.

The mission was positively impressed by the progress made on the restoration process and the high level of care and workmanship. The 2011 advisory mission gave recommendations on various aspects of the restoration. As far as this mission could see the restoration works are generally of a high quality. During the course of the works for the last four years, however, the project team has encountered some challenges related to adjustments made during earlier restoration works, as well as wall deformations during the present reassembling works. The strengthening of deformed walls has become a major issue that requires immediate action.

It is apparent that the project team has greatly developed skills and understanding of traditional and conservation carpentry and the application of conservation principles. The project team is constantly evolving these skills as the restoration continue, and the experience they have gathered during the processes of planning and practical restoring is a great benefit to the project.

At this time it is essential to get control on the wall deformations before it worsens, and this should be done as soon as possible to prevent permanent deformations. The movements of the building should be monitored during the summer, while the work on stabilization is going on. Half of the 5<sup>th</sup> tier is not reassembled yet, but is stored in a disassembled state. Storage of log buildings in a disassembled state will

increase the danger of uncontrollable deformations of logs, especially when there is a mixture of new and old timber. All these factors combine to make the situation very concerning.

The mission was informed that the contracts for the 3 companies working on the restoration project have recently expired. At the present time, tenders for the continuation of works have still not been announced. As a result, works are at present mostly put on hold, and it could take considerable time before new contracts can be signed. The fact that the project is at a very challenging stage of restoration right now, and that hiatus occurs in summertime, which is the best season for this kind of work, makes the situation rather unfortunate. Any delay in the restoration works, and especially at a time when the works have been going very well, could be a major setback for the project and could led loss of momentum. Furthermore new contractors could mean a loss of consistency and the need for retraining in the complex methods developed with the original contractors.

The mission is particularly concerned as the need for continuity has been raised in previous mission reports in relation to skilled craftspeople and to delays in the allocation of funds. For instance in the 2010 reports it was stated that: 'Taking into account that the overall restoration/conservation works needed for the World Heritage property could not be achieved by 2014, and that these works should not be stopped due to the lack of available funds, the mission recommends the State Party guarantees that financial support will be provided for protection, restoration, and management of the property after 2014'.

While in the 2011 Reactive Monitoring Mission report it was stated that 'Although funds and approvals are flowing for various projects, the major project at the Church of the Transfiguration is awaiting approval of its 3rd stage.

- this could result in delays in progress of the overall project,
- taking into account the scope of overall restoration/conservation work needed, current government financing to 2014 might not take the work to completion.

The 2011 mission and the Project Team estimate that the project will require five years to complete. Approval delays may add still more time to the project with risk to schedule and continuity of management.

## Recommendation:

The mission recommends that the State Party and Project Team urgently proceed with Stage 3 of the 7th Tier to allow the removed logs to be repaired and returned to their original positions in the building.

The mission further recommends updating funding requirements and the project schedule after completion of Stage 3 to ensure that continuous financial support and approvals will be provided for protection, restoration, and management of the property beyond 2014'.

**Recommendation**: The 2014 Advisory mission recommends immediate measures be undertaken to reduce any delay to the project as much as possible. Tender procedures should be arranged in due time to prevent further delays and to ensure necessary continuity. There is also an urgent need to ensure continuity of funding to avoid dislocation of the conservation schedule.

## 5.1.2 Structural reinforcement of the building

One challenge that has been discussed previously on several occasions is the need for structural reinforcement of the building. Within the structure of the Church of the Transfiguration there are five points which have previously been identified as areas of structural weakness. Over the past 18 years ICOMOS has regularly provided recommendations which have been to:

- a. restore the historic structure first.
- b. aim to allow it to support itself,
- c. add minimal reinforcement interventions if necessary,
- d. resist introducing state-of-the-art modern materials and technology.

At the moment, two and a half tiers of logs have been reassembled in the building, which equals approximately 30 layers of logs, making the walls at present about 8 meters high. The project team has now reported increasing challenges with deformation. Old logs tend to move towards old deformations, and it is becoming increasingly difficult to keep the upper part of the walls in position.

The advisory mission inspected the Church of the Transfiguration on two occasions, to have a closer look at the deformation, and to get a presentation of the issues on the site. There are deformations of up to approximately 20 centimetres at the most. Initially, wooden pegs were used to lock the logs in position. But as the works went on, the wooden pegs hindered compensation of deformations. Because of this, the use of wooden pegs has been stopped. In a few places steel rods have been mounted as a temporary support system.

Prof. Dr.-Ing. Jens Kickler (Beuth Hochshule für Technik, Berlin) did a presentation on reinforcement methods. His opinion is that horizontal movement along the logs is a problem, and he presented a method using long steel screws to stop the movement (Annex K). This method would need at least two screws in every log. Dr. Kickler informed that they have good experiences of using this method in Germany. His approach was supported by both the contractors and the Supervisory Committee. The advisory mission sees the convenience of this system, but states that it is not in accordance with the previous given recommendations of ICOMOS, since using screws in timber buildings is a modern kind of technology. Introduction of modern technology may compromise the integrity of the church, and should be avoided until all traditional methods of strengthening have been tried. The mission was also concerned that this system might not be flexible enough for a log building, and that this lack of flexibility might in turn cause further problems. Modern methods of reinforcement should only be considered if traditional methods are actually proven not to work in practice. Traditional methods of reinforcement should always be tried first.

At the time of inscription on the World Heritage list, the Church of the Transfiguration already had a support system made of vertical so-called *binding posts* (for an illustration of binding posts, see Annex E). Most likely this system was applied on the church at an early stage, because of the huge dimensions of the building. The mission team has not received certain information on this. Until now the binding posts have been seen as an added support system, and according to recommendations from previous missions, the building should be allowed to support itself without such

additional support. For this reason, binding posts have not been reintroduced in the restoration project. The 2014 advisory mission, however, is of the opinion that **the binding posts should be defined as part of the building, because no log building of this size can be stable without such a system.** This is the reason the binding posts were mounted in the first place. The mission also considers the extent of deformation in the reassembled walls to be expected, since the walls are reassembled without binding posts.

The use of binding posts is a well-known traditional way of supporting log buildings. Binding posts are wooden posts, one on the outside of the wall and one on the inside, each pair bound together with bolts through the wall. To account for vertical movement, especially sinking, it is necessary to make vertically prolonged holes, (slots), in the support post. If not, the necessary vertical movement of the timber walls will be hindered. The posts can be fixed firmly to the log at the bottom, with a bolt. The other bolts must have elongated holes or slots, and the length of these slots needs to be long enough to give room for the natural sinking and movements of the building. Therefore the slots need to be longer the further away from the fixed point it is. The need for movement also limits the length of each binding post, though it has to be of some length to be effective. This kind of system also often includes horizontal cross tension rods that fix the distance between two pairs of binding posts on opposite walls<sup>1</sup>. A combination of binding posts and cross tension rods makes a system that is very well suited to stabilize big log walls, and with which there is experience dating far back in time. It is important that binding posts are made of high quality material, and it will also be an advantage if they are cut in a way that makes them as strong as possible.

As stated above, a system of binding posts has been present in The Church of the Transfiguration, probably for more than 200 years, and this has been a crucial constructive part of the building during most of its history. Although a metal construction has been supporting the building for the last decades, the huge wooden church has proven its structural qualities before. The church has been standing on its own for more than 260 years, with a poor foundation, severe decay, and with traditional binding posts as its only supporting system. The mission can see no reason why the church should not still be able to stand on its own with the same supporting system as before, with the improvements of a steady foundation and repaired walls.

During the mission several participants and experts expressed doubt about the usefulness of using binding posts on the Church of the Transfiguration. The main objection was that these posts will not stop horizontal movement along the length of the logs. The mission agrees that binding posts will not stop horizontal movement completely, but is of the opinion that some horizontal movement is not a problem. The view of the mission is that a traditional system of binding posts will be sufficient to stabilize the construction, without affecting the flexibility of the building. In a building this size there will always be some deformation, and deformation to some extent has to be accepted.

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<sup>&</sup>lt;sup>1</sup> By the term cross tension rods, we mean horizontal steel rods, fixing the distance between walls or binding posts. They are commonly used in a system with binding posts.

The building is very complex, and it represents the limit of what is possible for traditional log construction. This makes it extremely difficult to make accurate calculations, and any engineered calculation on this construction will contain uncertainty of some degree. Even the best of engineers will have to include some safety margin. Therefore it is crucial that empiric facts are also taken in consideration. The fact that The Church of the Transfiguration has been standing on its own for more than 200 years with binding posts as the only supportive system is an empirical fact that should be given considerable weight.

The advisory mission considers that the binding posts should be reintroduced in the Church of the Transfiguration for three purposes:

- 1. Used the right way, the binding posts will make a frame that is sufficient for the reassembly of the repaired tiers, and it will make it easier to fix the walls in the right positions. This can be achieved by making temporary, one-sided support posts first, only on the outside of the walls. Some kind of temporary support for the posts will be needed during the reassembly. As the reassembled walls reaches the height of the posts, the inside posts can also be put in place, one by one, and bound to the exterior posts.
- 2. As a sufficient part of the building is reassembled and one length of binding posts is completed, the system can be turned into being a permanent support system for the church. The need for horizontal tension rods between binding posts should also be considered continuously as the project develops.
- 3. The system of binding posts will prevent deformation during reassembly, and allow the logs to sit in their correct position. As the logs will be seated in their actual position, they should eventually adapt back to a less deformed state.

For the Church of the Transfiguration, new binding posts should be made about the same size as the original supports, although a slight increase of dimensions may be acceptable. Because of the height of the walls, one pair of binding posts might have to consist of several posts in a vertical line. Binding posts in the same vertical line should overlap, but should not be fixed to each other, because of the sinkage of the walls.

**Recommendation**: The mission recommends that vertical binding posts are reintroduced into the Church of the Transfiguration as soon as possible. It is very important that this is done before any more weight is put on top of the walls. The need to connect some binding posts with horizontal tension rods across the interior of the building should also be considered. Such connections should preferably be done beneath the floor and above the ceiling. It could also be necessary to apply some temporary steel rods in strategic places between the ceiling and the floor during the reassembly of the building, but these should only be used as temporary elements.

**Recommendation**: Monitoring of the building is strongly recommended. This is crucial in order to understand if the system of binding posts is sufficient to stabilize the walls and to prevent severe deformation of the building. Additional supporting system for the walls should only be considered if the building moves more than expected. One other issue on strengthening that was briefly discussed during the mission was the so called *bridge*, where several layers of crossed logs carry the top part of the church. This part of the building is too narrow to rest on top of the walls, and the mission fully agrees that this part needs some kind of strengthening. The

mission had the impression that there are several different views and approaches to this problem which need to be further discussed.

Recommendation: The challenge of strengthening the bridge area should be discussed and explored as soon as possible, so that the strategy and solutions have been agreed before this part of the building is ready to be dismantled and restored. Suggested solutions should be discussed with ICOMOS perhaps through a future ICOMOS mission, to assure that the solution will not affect the OUV of the property.

## 5.1.3 Exterior cladding of the Church of the Transfiguration

The supervisory committee suggests the reintroduction of exterior cladding on the Church as way to support the construction, as well as a way to help protect the wooden logs against deterioration. The project team estimates that cladding was mounted on the church walls as early as the late 18<sup>th</sup> century. During the restoration works in the 1950s, the cladding was removed for being un-typical for the Russian north, and thus unoriginal, as the opinion of that time had it. There have been signs that deformation of the Church has increased after the removal of the cladding.

**Recommendation:** The mission recommends that the project team considers the reintroduction of cladding primarily as a protective element, but its use as a beneficial constructive element should also be considered. Further investigations on the building history regarding cladding would be desirable before suggestions are put forward to ICOMOS for discussion.

## 5.2 Management Plan and Area Development

## 5.2.1 Management plan

The museum has made considerable efforts to improve the draft management plan since 2012, and the mission considers that if the positive trend is kept up, this work will finally lead to a good tool for managing the WH property. At the moment though, important elements of the plan are still imprecise and in need of improvement. The plan is, for now, not a practical working document; for example, location and regulations of development areas need to be properly and clearly defined. The plan's main focus seems to be on development and increase of tourism rather than safeguarding the site and defining ways to limit negative impacts on the property.

As the mission sees it, a very positive step is the establishment of a Public Council for the Kizhi museum. This Council is to carry out public control over conservation issues. Management Plan implementation, and other development issues on Kizhi. It is important that the council should represent a wide range of stakeholders and professionals, and not be restricted to museum personnel and civil servants.

Recently, the museum has hired an external consultant, Gisle Jakhelln,<sup>2</sup> to help with the remaining issues of the management plan, which the mission considers to be a very important and useful step. The mission refers to ICOMOS technical review of April 2014 for further recommendations (Annex J).

<sup>&</sup>lt;sup>2</sup> Gisle Jakhelln – board member of ICOMOS Norway and former President of ICOMOS Norway 2008-2010. He is also President of CIAV (International Scientific Committee on Vernacular Architecture) and Vice President of ICOMOS Advisory Committee.

**Recommendation:** The mission reiterates the recommendations of the 2013 ICOMOS Reactive Monitoring Mission that the State Party review and submit a new draft Management Plan to the World Heritage Centre for review by the Advisory Bodies before finalization by the State Party.

**Recommendation:** The mission recommends that the tourism strategy and regulations for development be more focused on limitation of risks and protection of the OUV.

## 5.2.2 Area Development

Previous missions, as well as the World Heritage Committee, have repeatedly urged the State Party to halt all developments within the property and the buffer zone until the Management Plan is approved and put into operation. Nevertheless, various development projects have been planned and some implemented. In 2014, the most pressing issue is construction in the entrance zone.

a. Entrance zone: The Entrance zone has for long been subject to various proposals. The zone has until recently had a low standard, with inadequate facilities, and thus been unfit for receiving the large amounts of tourists arriving on the pier daily. Several proposals have been made during the years, but all previous missions have advised that any development should be halted until a Management Plan is in place, as noted above. In June and July, several buildings in the entrance zone were suddenly erected; some kiosks and small shops are already in use, and a restaurant building is also nearly finished. The explanation given by the Museum was, in effect, that "something had to be done": The 300<sup>th</sup> anniversary of the Church of the Transfiguration is to be widely celebrated in August this year, with corresponding attention from authorities, the Orthodox Church, the wider public and, obviously, the mass media. According to the Museum, it would simply have been shameful to receive all these guests under the poor conditions that were there until recently. The buildings are claimed to be reconstructions rather than new constructions, as they resemble those that stood there previously. In addition, they are claimed to be temporary buildings, as they are without proper foundation and made as log buildings that could easily be dismantled, if need be. The mission expressed understanding of the situation and of the museums desire and need for proper facilities, especially in connection with the 300 years anniversary.

Still, the anniversary did not come as a surprise to anyone, and the opinion of the mission is that the museum should have mentioned these needs at an earlier stage, for example to the April 2013 reactive monitoring mission. The museum agreed with this and regretted the lack of communication, but informed that they only recently found a private sponsor for this project, and that it is for that reason that the new buildings had to be constructed in a very short time. The museum again claimed that no new buildings had been built, and that all were simply reconstructions or copies of the previous buildings at the site. According to the museum, reconstructions and temporary buildings can be built without any further permission in accordance with Russian law. Later Director Nelidov handed the mission a document in Russian to support his statement, signed by three Russian experts (Annex L) and asked for this to be attached to the ICOMOS report.

The mission understands the need for proper facilities at the entrance zone, but reiterates earlier recommendations that no constructions should find place until a Management Plan is adopted and operational. Erection of new constructions at the island, that are not rooted in a comprehensive plan, is very unfortunate, and represents a danger to the OUV of the World Heritage site. Although temporary buildings may be allowed without formal permission from Russian authorities, in conformity with the para.172 and the World Heritage Committee Decisions all projects should be submitted, via Russian national authorities, to the WHC for review by the Advisory Bodies before any irrevocable decision is taken.

- b. The new pier by the church: The mission noted that there was some building activity at the waterfront by the Kizhi Pogost. According to the museum this is also a temporary project for the celebration of the 300th anniversary of the summer church. The project was described as a reconstruction of the timber pier that was in front of the Pogost before, and this pier was also referred to as a temporary construction that easily can be removed. The mission has no information as to the accuracy of this reconstruction
  - The buildings at the entrance zone have approximately the same shape and location as the previous ones, but the impression of the mission is that the new kiosks appear bigger and increased in number, and the new and large restaurant building has actually replaced an obviously smaller tent. Besides, the mission stresses that temporary buildings might often remain for years, and in fact eventually become permanent. The impact of a temporary structure to the WHS is not different from a permanent structure (See photos, annex Q). Furthermore, no impact assessments were carried out for any of these projects, neither in terms of heritage values nor in terms of environmental protection. As to the way of repairing or upgrading existing buildings, this should all be done with due respect to the heritage, and it should be grounded through precise regulations in the management plan. The mission has done no evaluation on the quality of the new structures, as our biggest concern is about the process. A proper evaluation of the new structures should be done when the Management plan of the area is completed.
- c. Road from Velikaya Guba to Oyatevschina. The mission was informed that construction is in progress, but has not had the opportunity to view it.
- d. The mission noted that restoration works have been carried out on at least one existing building on the island, a cabin or small dwelling house standing next to the Gogolyevsky guest house. The mission is not familiar with the history of this building, but states that the new exterior makes the building appear as a new house, with cladding and windows significantly differing from the previous ones. The building is not accessible for the public, but it is visible from the sea. The mission is concerned about how the museum, whose aim is to protect the region's heritage, treats its own buildings in a way that does not correspond to conservation principles. The opinion of the mission is that this should not be allowed to make precedence for other house restorations, neither on Kizhi Island, nor in the buffer zone.

The opinion of the mission is that these development projects should have been mentioned to the April 2013 mission, even if they are just meant as temporary structures.

**Recommendation:** There should be no distinction made between temporary and permanent structures within the property and its buffer zone. Temporary buildings should be treated the same way as permanent structures. When the Management plan is finalized, new structures should be evaluated in accordance with the regulations of the management plan.

**Recommendation:** All restorations projects and other physical measures on buildings should be carried out in accordance with the management plan. All historical buildings should be treated in accordance with conservation principles.

Recommendation: The 2014 mission repeats the request of the 31COM 2007, 32COM 2008, 33COM 2009; 34COM 2010; 36COM 2012; 37COM 2013 following the recommendations of the Reactive Monitoring Mission in 2011 and 2013 and Advisory Mission in 2011 that the State Party be requested to halt all future construction development at the property and its buffer zone, until the Management Plan has been completed and approved by the World Heritage Committee. Previous missions were not briefed on development projects recently completed or currently underway. All development projects must be developed with an adequate impact assessment of their immediate and cumulative impacts on the Outstanding Universal Value of the property and in consideration to the environmental protection. Use of already existing buildings should always be seriously considered.

It is very unfortunate that several new projects have been initiated in conflict with the World Heritage Committee decisions and without any agreement received from the national authorities in charge of World Heritage and UNESCO. It is crucial that the museum follows the advices and decisions made by UNESCO in the future. The 2014 mission strongly recommends that necessary measures are taken to ensure that no further development will happen on Kizhi Island until the management plan is finally approved. When the management plan is finished the new buildings and structures must be critically evaluated to state what should be removed and what might be kept.

## 5.2.3 Management of agricultural land

Traditionally, active farming and animal livestock were present practically all over Kizhi Island and in the adjacent areas. Historical photos show that the vegetation used to be very low. As the Soviet Union collapsed, so did the system of collective farms, and, as a consequence, farming in the area gradually ceased to function. The lack of agricultural activity on Kizhi is leading to the re-growth of the landscape, which is a danger to the integrity of the property. In addition, uncut grass and forests might represent an increased risk of fire. Traditional farming with grazing animals and harvesting of fields is the best way to keep the traditional landscape, and the only way to sustain the local biodiversity. It will also represent a factor of authenticity in the landscape. Traditional farming is mentioned in the Management Plan, but how to revitalise farming is poorly described and needs to be elaborated.

**Recommendation:** The mission recommends that the museum develops a plan on how to manage previous farmland. It suggests that the reintroduction of traditional farming at some level be considered.

## 5.3 Review of the over-all state of conservation of the property

5.3.1 Evaluation of factors of conservation issues that can potentially affect the Outstanding Universal Value (OUV) of the property, including its conditions of authenticity and integrity

Though the restoration project has reached a very challenging period at the moment, the progress is good, and the work is being carried out with a high quality in every way, as stated above. Still, the mission has identified some factors which might affect the OUV of the property.

- 1. On the building and the process of restoring of the building:
  - **a. Strengthening systems:** The use of modern methods and materials to an excessive degree might affect the integrity of the church.
    - **Recommendation:** The mission reiterates previously given recommendations, that the introduction of new strengthening systems should be made to a minimum degree, and that traditional methods should be preferred. Modern materials and technology should be avoided
  - b. Delay in the restoration process: Previous missions have repeatedly stressed the importance of the restoration project continuing with no interruption. It has also been stated that a delay in the restoration project could be a danger to the Outstanding Universal Value of the property.

The current mission notes that the delay in the restoration work is now not only a threat, but a reality. This mission reiterates the views of previous ICOMOS mission, that halting conservation work is a danger to the OUV of the church, and actions to resume such work should be taken immediately.

**Recommendation:** The mission recommends immediate measures be undertaken to reduce the delay of the project as much as possible, and suggests that the contractors that have been working with the project until recently are given temporarily renewed contracts until contracting procedures for a new period are finished, provided that this is possible within the Russian legislation.

**Funding of the restoration process:** During meetings, concerns were expressed to the mission as to the financial support of the restoration. The mission's perception is that funds are indeed available through the Russian federal budget, but that tender procedures must be followed in order to activate funds.

**Recommendation:** The mission urges the authorities to ensure that funding for the next stage of restoration is approved and made available.

- c. Project organization: There has been a minor change in the organization of the restoration project. The company Spetsprojectrestavrazia has been replaced by the company Georekonstrukzia. The mission was informed that this is just an administrative change, the key personnel from Spetsprojectrestavrazia still remain, and there has been no actual change of personnel in the project.
- d. Contracting methods: The contractors for the restoration project (Zaonezhie, Alekon and Georekonstrukzia) participated fully in the various meetings and briefings. The Advisory Mission was again positively impressed by the participation and commitment of the contractors. All the contractors have been involved in the restoration process from the beginning, and have earned valuable experience and understanding of this complex building, which would not be possible to achieve in any other way. The mission reiterates the concern of earlier missions, that contracting procedures for future phases of the work might lead to awarding future contracts to firms with less capacity, skills and ability to properly estimate and carry out the scope and cost of the work. It is crucial for the success of the restoration that key persons from every part of the restoration team continue within the project to ensure that the experience gained so far is not lost.

**Recommendations:** The mission recommends that the State Party investigate all possible means to ensure bidding contractors have appropriate skills and quality workmanship. It is also recommended that measures be undertaken to try and ensure that key skilled persons from the recent contractors are kept within the project team. It is also essential that the capacity of the museum carpentry staff be protected and maintained.

## 2. On area management and development:

- **a. Management Plan.** Until the Management plan is finished and finally approved by the WHC, the lack of a management plan can affect the OUV of the property. Strict implementation of the Management Plan is essential. Any initiatives that are inconsistent with the plan have a potential to affect the OUV of the property.
- **b. Development:** The mission is concerned about development being undertaken despite the advice from the World Heritage Committee, and with no attempt to communicate this prior to project implementation. It is easy to acknowledge the fact that the museum has a minimum need of facilities for the tourists, but it should still be provided in accordance with the recommendations of the Committee and in dialogue with the World Heritage Centre and ICOMOS.
- **c.** Church pier: The mission has no information on the quality of reconstruction or level of ambitions for the pier by the church site, except that it was supposedly built as a reconstruction and a temporary structure. The mission was informed that the original pier was there at the time of inscription, but no documentation has so far been provided.

The presence of a new reconstruction this close to the church is concerning, especially since a pier will make it possible to place floating vessels of any kind and size right in front of the church. The opinion of the mission is that the church pier is a potential threat to both the authenticity and the integrity of the World Heritage Site. In any case such projects should only be done in accordance with an approved management plan.

d. Copies or reconstructions: The distinction between copies, reconstructions and new buildings might be a subject for discussion, and different authorities might have different approaches to this question. A common way to look at this is that a reconstruction or a copy should be exactly like the original both in measures, materials and workmanship. The same applies to a restoration or a repair, except then it also has to include a minimum of reused material and building parts. Generally copies or complete reconstructions are not approved in connection with cultural heritage, since they can easily lead to misinterpretations and thus have a negative effect on the authenticity of the property. Kizhi Island is in fact an open air museum. It is the opinion of this mission that it might be possible to build some new log buildings in accordance with the tradition in some limited areas of the island and/or the buffer zone, provided that it is also in accordance with the management plan. It is very important that the management plan is clear on limiting the number, size and shape of possible new constructions. There is a thin line between traditional building and copying. New buildings in the area are therefore acceptable only to a strongly limited extent and based on thorough and well justified reasons. To avoid misunderstandings on this subject, the mission wants to emphasize strongly that no buildings or structures must be built until a final management plan is approved by UNESCO.

## 5.4 Buffer zone

A proposal for an enlarged buffer zone was submitted officially by letter on 4<sup>th</sup> February, 2014 (Annex N).

ICOMOS recommended in its evaluation of this proposal (Annex G) that the State Party provide details on how protection measures will be guaranteed. It also recommended that the WHP Protected Zone Kizhi Pogost be amended so that it corresponds to the Buffer zone. These recommendations were adopted by the Committee at its 38<sup>th</sup> session (Doha, 2014).

According to the museum, the enlargement of the Protected zone is bureaucratically very difficult, expensive, and time-consuming (Annex O).

The mission understands the problems connected to bureaucratic procedures regarding amendments of the museum protection zone. Various planning tools are in use already: First, the museum has sent a request for registration of land plots in permanent use for the recreational activity in order to conserve the old-growth forests within the WHS visibility distance (Page 34, Management Plan). Secondly, the entire buffer zone lies within the Master Plan of the Velikaya Guba settlement. Works on the elaboration of this Master Plan are in progress, in close cooperation between the museum and the Velikaya Guba administration. Thirdly, the museum also informed

that work is in progress regarding the establishment of a cultural heritage park "Kizhi volost", which would include the entire buffer zone area.

**Recommendation:** The State Party should seek to establish relevant and sufficient protection measures throughout the entire buffer zone, as requested by the World Heritage Committee.

## 5.5 Fire protection and security plans

The museum made presentations on fire protection and security plans. The museum has worked further towards the implementation of the plans that were presented to the 2011 mission. In addition there are also plans for installing a suppression system in the churches and the Bell tower, in accordance with the recommendations of the 2011 and the 2013 missions. This is a welcome improvement. For the safe operation of the fire protection system, and to avoid its uncontrolled release, it is crucial that the system is managed by qualified and trained personnel, and that the equipment is maintained regularly. A risk management plan is now included in the Management Plan, which the mission sees as an important step.

**Recommendation:** The mission reiterates the previous recommendations of the 2011 and 2013 reactive monitoring missions, and the 2011 advisory mission, that the State Party implement the fire protection and security plans as presented because these will improve the level of protection and the quality of the environment near the World Heritage property.

## 5.6 Guiding principles for the restoration projects

The mission was presented with a set of guiding principles which are incorporated in the management plan. These principles are based on international acknowledged principles and documents, as well as the recommendations of earlier missions. This is a positive step which should be developed further. There was not enough time to discuss this subject thoroughly, but the impression of the mission is that the guiding principles are still at quite a general level, with some exceptions. Guiding principles should be more precise and with illustrations, in order to actually become a useful tool for the restoration project. An example of such principles is the Guidelines for selecting log repair methods at Kizhi Pogost, from earlier missions, last amended by the November 2011 advisory mission.

**Recommendation:** The mission recommends that the Guiding principles be augmented for particular issues, with illustrations and precise descriptions on possible solutions. In that way they will become a tool that is more easily applicable to the restoration work.

## 5.7 Review of the current status of project proposals related to the Office and Public centre.

Project proposals related to the Office and Public centre are put on hold until the Management plan is adopted.

## 5.8 The supervisory committee for the restoration works.

The supervisory committee is working very well. Five members of the committee were present during the meeting, and provide valuable inputs and considerations during our discussions. The mission welcomes the work done by the supervisory committee, and notes with satisfaction that the group plays an important role with its high level of competence and experience.

## 5.9 Monitoring system for the World Heritage Site

The museum has made great efforts in establishing monitoring systems, using sophisticated technologies for detecting material weaknesses, as well as elaborating new methods for fighting fungi and beetles without the use of chemicals or interventions. Procedures are established for regular scanning and monitoring of the wooden buildings at the museum.

## 5.10 Educational center for conservation of wooden monuments

The museum presented plans for an educational center for the conservation of wooden architecture and monuments. The goal is to develop and to preserve traditional methods and knowledge on restoration and conservation work. The restoration center actually works as a place for learning and development of skills as it is. The museum wants to use both internal and external instructors for this course, and it is planned three levels of education: beginners, craftsmen and academics. It is described as a practical and theoretical education. The museum wants to cooperate with UNESCO and the University in Petrozavodsk on this work, with the aim of setting a standard for such training in Russia. The mission finds these plans very positive and would like to express its support.

## **5.11 Experts Web-site**

The posting of progress photos on this site for periodic review by ICOMOS has proven to be a very useful tool and should continue.

**Recommendations:** The mission recommends that regular uploading of project photos to the web site, as previously set up for this purpose, should continue as a very effective monitoring tool for the Advisory Bodies and the World Heritage Centre.

## **5.12 Monitoring Mission**

The next six to twelve months will be a critical period for the Kizhi Pogost World Heritage property with the completion of the 4<sup>th</sup> and 5<sup>th</sup> tier, progress of the work of the 3<sup>rd</sup> tier, the crucial work of stabilizing the deformation of the construction, and the finalization of the Management Plan.

**Recommendations:** The Advisory Mission recommends that the State Party might like to consider a follow-up monitoring mission in spring 2015 in order to assess the progress of the conservation project, and the completion of the Management Plan.

## **ANNEX A**

## **Composition of the Mission Team**

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## **ANNEX B**

## **Participants**

# Participants of the ICOMOC/WHC mission from the Russian Federation. July, 2<sup>nd</sup> - 5<sup>th</sup>, 2014, Kizhi island, Russian Federation

$N_{\underline{0}}$	Name	Position
	Commission of the Russi	an Federation Ministry of Culture
1.	Sevan Olga Georgievna	Consultant of the "Heritage Institute", PhD in
		Architecture, ICOMOS member
2.	Vakchrameeva Tatiana Ivanovna	Head of the "LAD" company, 1st category
		architect-restorer (Petrozavodsk)
3.	Orfinsky Vjacheslav Petrovich	Academician of Russian architectural
		academy (Petrozavodsk)
4.	<b>Popov</b> Alexander Vladimirovich	Councilor of Russian architectural academy
		(Kirillov)
5.	<i>Popov</i> Viktor Aleksandrovich	Architect for the Open-Air museum
		"Vitoslavlitsy", 1 <sup>st</sup> category architect-restorer
		(Novgorod)
6.	<i>Titov</i> Vladimir Aleksandrovich	1 <sup>st</sup> category architect-restorer, ICOMOS
		member, (Archangelsk)

# Participants of the ICOMOC/WHC mission from the Russian Federation. July 02-04<sup>th</sup>, 2014 Kizhi island, Russian Federation

R	Representatives of the companies involved in the restoration of the Church of the		
	Transfiguration		
№	Name Position		
1.	Rakchmanov Vladimir Stepanovich	Head architect for the restoration, «Research	
		Institute "Spetzprojectrestavratsija", (St.	
	Petersburg)		
2.	Skopin Vitalij Aleksandrovich	Head of "ARC "Zaonezhje" company	
		(Petrozavodsk)	
3.	Saveljev Aleksandr Aleksandrovich	Head of "SKF "ALEKON"" company	
	(St.Petersburg)		
4.	KicklerJens	Professor, doctor of the Berlin technical	
		university	
5.	Rasha Iosiph Kirillovich	"Strojrekonstruktsija" company (St.	
	_	Petersburg)	

## Participants of the ICOMOC/WHC mission. April $1^{\text{st}}$ - $6^{\text{th}}$ , 2013, Kizhi island, Russian Federation

	The Kizhi mu	seum employees	
N	Name	Position	
1.	Nelidov Andrey Vitalyevich	Director of the museum	
2.	Lugovoj Dmitriy Dmitrievich	1 <sup>st</sup> deputy director	
3.	<i>Ljubimtsev</i> Alexander Yuryevich	Site manager	
4.	<i>Nezvitskaya</i> Tatyana Viktorovna	Chief of the security and integrity of	
		historical and architectural complex and	
		landscapes preservation service	
5.	<i>Kozlov</i> Alexander Valeryevich	Manager of the conservation of cultural	
		heritage restoration and monitoring	
		activities service	
6.	Kovalchuk Andrey L'vovich	Chief carpenter	
7.	<i>Kontsevenko</i> Tatjana Viktorovna	Engineer of the conservation of cultural	
		heritage restoration and monitoring	
		activities service	
8.	Kuusela Alexander Sergeevich	Chief of the conservation of cultural	
		heritage restoration and monitoring	
		activities service	
9.	Kuspak Vladislav Nikolaevich	Chief architect	
10.	<i>Titova</i> Olga Yyurevna	Chief of the WHS management service	
11.	Bukchina Olga Georgievna	Tatyanas	
12.	Brigina Tatyana Sergeevna	Interpreter	
13.	Isaev Alexey Aleksandrovich	Interpreter	
		ted for the meeting with the interested	
	parties on July, 4 <sup>th</sup>		
14.	Anisimova Anna Vladimirovna	Senior lawyer	
15.	Maksimov Alexander Sergeevich	Lawyer	
16.	Pavlova Irina Viktorovna	Deputy Director of the educational and	
		socio-cultural activities of the Kizhi	
		museum	

## **ANNEX C**

# TERMS OF REFERENCE FOR THE ICOMOS ADVISORY MISSION TO THE WORLD HERITAGE PROPERTY KIZHI POGOST, RUSSIAN FEDERATION (1-7 JULY 2014)

The World Heritage property of Kizhi Pogost was inscribed on the World Heritage List in 1990 under cultural criteria (i), (iv) and (v). At its 37th session (Phnom Penh, 2013), the World Heritage Committee requested the State Party to invite an ICOMOS Advisory mission in early 2014 to assess the progress made in the restoration works and on the implementation of Decision 37 COM 7B.80.

Taking into consideration the World Heritage Committee's Decision, as well as the Operational Guidelines for the Implementation of the World Heritage Convention, the mission should <u>review</u> and <u>assess</u> the following key issues:

- 1. Review the overall state of conservation of the property and evaluate factors and conservation issues that can potentially affect its Outstanding Universal Value, including its conditions of authenticity and integrity;
- 2. Assess the progress made in the restoration works of the Church of the Transfiguration;
- 3. Review progress made in the implementation of the recommendations made by the April 2013 reactive monitoring mission to the property, in particular:
  - a) Finalization of the management plan to ensure that the conservation and protection of attributes that convey the Outstanding Universal Value (OUV) of the property drive decision-making. Verify whether the revised Management Plan includes regulations for land use and for new developments, as well as provisions for the management of the agricultural landscape, a sustainable tourism strategy, risk preparedness measures and measures for monitoring the state of archaeological resources,
  - b) Assess whether proposed new developments in the buffer zone and setting of the property, including visitor and administration facilities, were halted and whether Heritage and Environmental Impact Assessments were undertaken to take into account the expected impacts and compatibility of development with the OUV of the property. Assess the results of the Impact Assessments and current status of the proposed developments,
  - c) Implementation of the fire protection and security plans to improve the level of protection and quality of the environment at the property,
  - d) Development of Guiding Principles for the restoration projects that relate the conservation work to the key attributes of the property;
- 4. Review specifically the current status of the project proposal, technical specifications and heritage and environmental impact assessments, for the Office and Public Centre of the Kizhi Museum and for any other planned development projects, to be submitted by the authorities for review by the World Heritage Centre and the Advisory Bodies prior to committing to its implementation;

The mission should hold consultations with the Russian authorities at national and local levels and all other relevant stakeholders, including the civil society.

Based on the results of the above-mentioned assessment, the mission team shall prepare a mission report in English or French, including recommendations to the State Party to further improve the conservation and management of the property. The final report should be submitted for review and comments to the World Heritage Centre and its transmission to the State Party.

## **ANNEX D**

## **Mission Programme**

# The preliminary program of the ICOMOS advisory mission $1-6\ July\ 2014$ World Heritage property Kizhi Pogost Russian Federation

Time	Activity
	July 1
	Arrival of the mission participants to the Russian Federation (Moscow, St. Petersburg)
	July 2
06.40	Arrival of the mission participants from St. Petersburg to Petrozavodsk.
09.00	Arrival of the mission participants from Moscow to Petrozavodsk
09.00 - 10.00	Breakfast
10.00 - 10.30	Transfer of the participants to the port
10.30 -	Departure of the participants to Kizhi Island from Petrozavodsk (water transport).
departure	
11.45 – 12.30	Arrival of the participants to Kizhi Transfer to the accommodation
12.45 – 13.45	Lunch
13.45 – 14.00	Transfer of the participants to the Experts House
14.00 – 14.30	General report on the objectives and procedure of the mission, adjustment of the program (if necessary). Distribution of information materials
14.30 – 14.45	Transfer of the participants to the property
14.45 – 17.30	Site visit to review the overall state of conservation of the property and evaluate factors and conservation issues that can potentially affect its Outstanding Universal Value, including its conditions of authenticity and integrity
	Acquaintance with the works performed on the territory of the Kizhi Pogost Acquaintance with the results of the restoration work of the Church of the Transfiguration on the 6 <sup>th</sup> and 5 <sup>th</sup> restoration tiers
17.30 – 17.45	Getting back to the Experts House
17.45 - 18.00	Coffee break
18.00 – 19.30	Brief reports: - state of conservation of the property - progress made in the implementation of all correctives measures identified in 2010 - progress made in the finalization of the management plan of the property, - progress made in the development of Guiding Principles for the restoration projects that relate the conservation work to the key attributes of the property - results of the work on the assembly of the monument restoration tiers, - engineering strengthening system of the church, - development of the project on the technical security systems of the Property.
	Questions and discussion

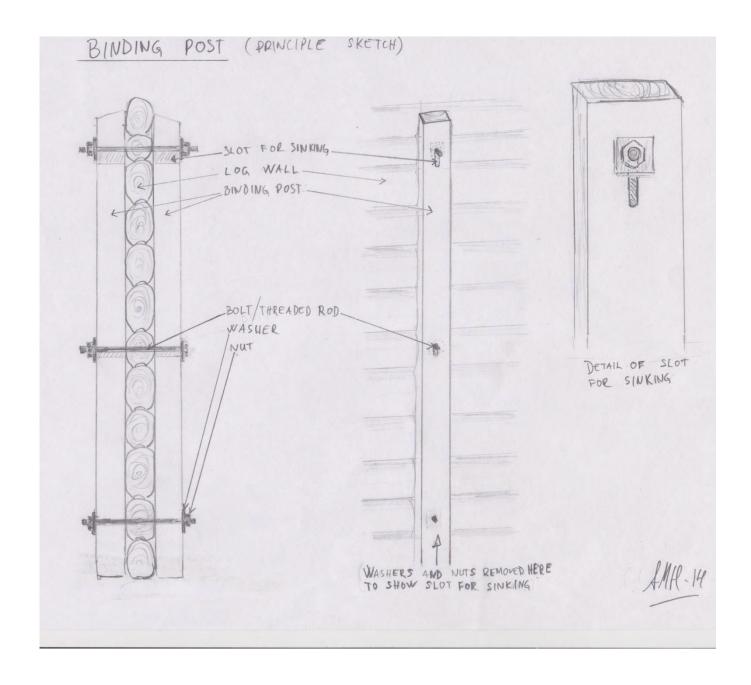
19.30 – 20.30	Dinner
20.30 – 21.00	Continuation of discussion (if necessary)
	July 3
8.15 – 9.00	Breakfast
9.00 - 9.30	Transfer of the participants to the Restoration Center
9.30 – 11.30	Report: - on the results of the work performed in the restoration complex
	Inspection of the dismantled logs of the 4 <sup>th</sup> tier. Detailed inspection of the assembled part of the dismantled tier, consulting support of damage identification and restoration processes
11.30 – 11.45	Coffee break
11.45 – 12.00	Transfer of the participants to the restoration timber warehouse
12.00 - 12.30	Acquaintance with the process of restoration material preparation
	Inspection of the prepared material and storage conditions
	Getting back to the Experts House
12.30 – 12.45	Transfer of the participants to the Restoration Centre
12.45 – 13.45	Discussion of the work results, restoration criteria and related issues
14.00 – 15.00	Lunch
15.00 – 15.15	Transfer of the participants to the restoration workshops
15.15 – 16.15	Acquaintance with the process of restoration of the Transfiguration Church iconostasis
16.15 – 16.30	Getting back to the Experts House
16.30 – 16.45	Coffee break
16.45 – 18.45	Reports:  - Monitoring program during and after the restoration  - The project of creation of the educational center of the Kizhi Museum on wooden architecture monuments conservation
	Discussion of the results of the work performed on Kizhi Pogost and in the restoration complex
19.00	Dinner
	July 4
8.15 – 9.00	Breakfast
9.00 – 9.30	Transfer of the participants to the property, its buffer zone and setting
9.305 - 12.30	Site visit to review the overall state of conservation of the property, including the visit of the buffer zone and setting
12.30 - 13.00	Transfer of the participants to the Experts House
13.00 – 14.30	Lunch
14.30 – 16.30	Detailed presentations of legal and planning tools:  - Legal protection issue, including presentation of the status of specially protected territories for agricultural lands and woodlands,  - Land use, control of development and fluvial regulation, including control and prevention of
	unplanned and illegal constructions,

	- Stakeholders coordination Discussion	
16.30 – 17.00	Coffee break	
17.00 – 19.00	Detailed presentations of legal and planning tools (continued):	
	<ul> <li>Requirements for the protection of the property included in the Velikaya Guba settlement master plan,</li> <li>Master Plan for Kizhi Island, including strict land-use regulations for all protected areas,</li> <li>Inspection and monitoring of the state of conservation of the property and its buffer zone,</li> <li>Geographic Information System (GIS) to guide actions for the preservation of the landscape and assess impacts on the visual qualities of the setting</li> <li>Discussion</li> </ul>	
	Discussion	
19.00 – 20.00	Dinner	
	July 5	
8.15 – 9.00	Breakfast	
09.00 – 11.00	Detailed presentations (continued):  - Draft management plan of the property,  - Tourism strategy (including strict regulation of river based tourism),  - Conservation Master Plan for all components of the World Heritage property and its setting,  - Guidelines for the re-use of the existing numerous historic buildings and monuments comprising the Open Air Museum for visitor facilities and exhibitions,  - All planned development proposals and projects in the buffer zone and setting, based on the re-use of existing historic buildings and monuments,  - Heritage and environmental impact assessments	
	Discussion	
11.00 – 11.15	Coffee break	
11.15 – 13.30	Detailed presentations and discussions (continued)	
13.45 – 14.45	Lunch	
15.00 – 15.30	Transfer of the mission participants to the pier, departure to Petrozavodsk	
15.45 – departure 17.00	Arrival in Petrozavodsk Meeting with the representatives of the Administration of Karelia in Petrozavodsk (if relevant)	
	Working and debriefing meeting in Petrozavodsk/ Discussion and exchange of opinions of the experts on the state of conservation of the World Heritage property and on the physical state of the Church of the Transfiguration, in presence of the national, regional and local authorities (optionally this meeting can also be held at Kizhi)	
July 6		
	Expert's working day in Petrozavodsk / Draft recommendations and mission report	
20.08 22.30	Departure from Petrozavodsk Transfer to the train to Moscow. Departure Transfer to the train to St. Petersburg. Departure	

Note: in case of changes in transport schedule (rail or water), the program can be adjusted

ANNEX E

Illustration of Binding Post



## **ANNEX F**

## Working Document and Decision of the 38<sup>th</sup> Session of the World Heritage Committee (Doha, 15-25 June 2014)

## Kizhi Pogost (Russian Federation) (C 544)

Year of inscription on the World Heritage List

Kizhi Pogost: 1990

Criteria

Kizhi Pogost: (i)(iv)(v)

## Previous Committee Decisions:

See page <a href="http://whc.unesco.org/en/list/475">http://whc.unesco.org/en/list/475</a>

### Illustrative material:

See page <a href="http://whc.unesco.org/en/list/475">http://whc.unesco.org/en/list/475</a>

Year(s) of inscription on the List of World Heritage in Danger

N/A

Desired state of conservation for the removal of the property from the List of World Heritage in Danger

N/A

Corrective measures identified

N/A

## International Assistance

Requests Approved: 2 (from1992-2001) Total Amount Approved: 38,540USD

2001	International Workshop on the preservation and conservation of wooden structures on the example of the restoration project of the Church of the Transfiguration of the Kizhi Pogost( Approved )	29,540 USD
1992	Mission of 3 experts to define the state of conservation of the site of Kizhi Pogost, to identify problems linked with wood conservation and formulate a plan of action( Approved )	9,000 USD

## UNESCO Extra-budgetary Funds

N/A

### Previous monitoring missions

1992, 1993, 1994, 2011: ICOMOS mission; 2002: UNESCO/ICOMOS/ICCROM mission and on-site workshop; 2007, 2010 and 2013: World Heritage Centre/ICOMOS reactive monitoring mission.

- 2013 <u>Joint World Heritage Centre / ICOMOS reactive monitoring mission report to Kizhi Pogost (Russian Federation), from 1 to 6 April 2013</u>
- 2011 Report on the ICOMOS advisory mission to Kizhi Pogost, Russian Federation, 29 November 4th December 2011
- 2011 Report on the reactive monitoring mission to Kizhi Pogost, Russian Federation, 20-25 February 2011
- 2010 Joint World Heritage Centre-ICOMOS mission, 5 7 April 2010
- 2007 Joint UNESCO-ICOMOS mission, Kizhi Pogost, Russian Federation, 8 17 April 2007
- 2002 Mission to participate in the International Workshop on Kizhi Pogost and the preservation and conservation of wooden structures of the Church of the Transfiguration (31 July-5 August 2002) (12 pp)
- 2002 Recommendations of the International Workshop on Kizhi Pogost and the preservation and conservation of wooden structures of the Church of the Transfiguration (31 July-5 August 2002) (15 pp)

### Factors affecting the property identified in previous reports

- Structural integrity issues at the Church of the Transfiguration;
- Lack of an integrated management plan addressing the overall management of the World Heritage property;
- Tourism development pressures.

### Current conservation issues

- a) On 31 January 2014, the State Party submitted a state of conservation report, which is available at <a href="http://whc.unesco.org/en/list/544/documents/">http://whc.unesco.org/en/list/544/documents/</a>. Progress is reported on the following:
- b) Management plan: the plan was revised in 2013. It considers projects aimed at protection and conservation of the property and its environment, and provisions for sustainable development, a management scheme, and monitoring.
- c) New development in the buffer zone and setting: the proposal for an administration and visitor centre has been suspended. Heritage and Environmental Impact assessments will be carried out and submitted for review. The management plan foresees the undertaking of heritage impact assessments prior to authorizing projects.
- d) Fire protection and security measures: overall plans have been revised and a site security system is operational. Emergency measures identified in a document "Overhaul of the outdoor fire-fighting system of the Kizhi Pogost" are being reviewed to improve risk preparedness.
- e) Restoration projects: Guiding principles for interventions are included in the management plan. Funding has been allocated to continue without interruptions, interventions at the Church of Transfiguration.
- f) Legal protection: new legislation has come into force that increases administrative penalties for violation of the requirements of conservation, use and protection of cultural heritage or for failure to observe restrictions in buffer zone.
- g) Protection and buffer zone: a request for a minor boundary modification was submitted in November 2013 and will be examined by the Committee under the corresponding item. The report indicates that agricultural lands and woodlands are to be granted the status of specially protected territories to address inconsistencies in projected use. Monitoring is also being carried out to identify illegal construction in the buffer zone. Information on regulations in the buffer zone is also being provided to residents and visitors. The requirements for the protection of the property have also been included in the development of the Velikaya Guba settlement master plan. A Geographic Information System (GIS) has been developed to guide actions for the preservation of the landscape and assess impacts on the visual qualities of the setting.
- h) Other actions have been implemented including continued research, and a promotion programme. Power infrastructure will be improved through underground cabling systems.

#### Conclusion

The commitment of the State Party in sustaining actions to improve conservation and management conditions of the property is acknowledged. The recently approved legislation will be highly beneficial in effectively controlling unplanned and/or illegal construction. Informing residents and visitors about regulatory measures is also an important measure. Concerning the proposed minor boundary modification to increase the area of the buffer zone, this will be examined by the World Heritage Committee under Item 8 of the Agenda.

The management plan has been reviewed by ICOMOS. In general, it considers that the submitted document has addressed some of the recommendations made on the 2012 draft. It positively notes the addition of the requirement for Heritage Impact Assessments (HIA) to better inform decision-making and recommends that the ICOMOS HIA guidance be used to identify criteria for their undertaking. ICOMOS considers however that the Action Plan does not yet address the tourism strategy (including strict regulation of river based tourism), which should be developed before any tourism infrastructure, and facilities are studied in relation to their compatibility with the character of the property and its Outstanding Universal Value (OUV).

In relation to the conservation guidelines, ICOMOS notes that although general principles are set, they still need to refer specifically to the application of conservation guidelines for the structures of the property and its setting. Further clarity is also needed in terms of landscape protection and

management, particularly considering the approved legislative measures. A more detailed technical review will be exchanged with the State Party to support further evaluation.

In respect to restoration interventions, resources were positively allocated in a timely manner therefore allowing the interventions to proceed without interruption. Further information on the progress made in interventions will be available upon the undertaking of the Advisory Mission scheduled in 2014.

Land use, control of development and fluvial regulation will remain a substantial challenge to maintain the integrity of the unique landscape of the property particularly in light of tourism pressures. This will entail the strong commitment of the State Party and sustained enforcement of different legal and planning tools that have been formulated and adopted to date. The Committee may reiterate its concern regarding proposals for new development and tourism infrastructure which can potentially alter the historical and visual characteristics of the property and its setting and request that the authorities concerned to maintain the present balance between the natural and built environment by regulating tourism development and restricting any extension of development within the protected areas of the Kizhi Museum-Reserve and Kizhi Island.

It is also recommended that the Committee reiterate its requests to implement all correctives measures identified in 2010, and to submit the revised and approved Master Plan for Kizhi Island, including strict land-use regulations for all protected areas, an Integrated Management Plan with appropriate tourism strategy and guidelines for the re-use of the existing numerous historic buildings and monuments comprising the Open Air Museum for visitor facilities and exhibitions, as well as a Conservation Master Plan for all components of the World Heritage property and its setting.

## Decision Adopted: 38COM 7B.30

The World Heritage Committee,

- 1. Having examined Document WHC-14/38.COM/7B,
- 2. Recalling Decision 37 COM 7B.80 adopted at its 37th session (Phnom Penh, 2013),
- 3. <u>Commends</u> the State Party for its sustained actions in the implementation of recommendations made by the World Heritage Committee and the monitoring missions to the property;
- 4. <u>Takes note</u> of the submission of the request for minor boundary modification for examination by the World Heritage Committee at its 38th session under Item 8 of the Agenda;
- 5. Reiterates its concern that the introduction of any new developments or tourism infrastructure will alter the historical and visual characteristics of the property and its setting, and <a href="highlights">highlights</a> that the present balance between the natural and built environment at Kizhi Island should be maintained;
- Urges the State Party to regulate tourism pressure (including river based tourism) and to prohibit the extension of developments within the protected areas of the Kizhi Museum-Reserve and Kizhi Island;
- 7. <u>Also urges</u> the State Party to continue its efforts with particular attention to the finalisation of the review process of the Management Plan considering the recommendations made by the ICOMOS technical review and to further clarify provisions for landscape management;
- 8. Reiterates its request that the State Party implement all correctives measures identified in 2010, and submit the revised and approved Master Plan for Kizhi Island, including strict land-use regulations for all protected areas, an Integrated Management Plan with appropriate tourism strategy and guidelines for the re-use of numerous existing historic buildings and monuments comprising the Open Air Museum for visitor facilities and exhibitions; as well as a Conservation Master Plan for all components of the World Heritage property and its setting;
- 9. Also reiterates its request that the State Party halts all proposed new developments in the buffer zone and the settings of the property, including visitor and administration facilities until these are reviewed, and requests the State Party, in accordance to Paragraph 172 of the Operational Guidelines, to submit, upon completion, the project proposal, technical specifications and heritage and environmental impact assessments, for the Office and Visitor Centre of the Kizhi Museum and for any other planned development projects based on the reuse of existing historic buildings and monuments, for review by the World Heritage Centre and the Advisory Bodies prior to committing to their implementation;

10. <u>Also requests</u> the State Party to submit to the World Heritage Centre, by **1 December 2015**, an updated report, including a 1-page executive summary, on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 40th session in 2016.

## **ANNEX G**

## ICOMOS evaluation of request for minor boundary modification and Decision 38COM 8B.55

## Kizhi Pogost (Russian Federation) No 544 Bis

#### 1 Basic data

#### **State Party**

Russian Federation

### Name of property

Kizhi Pogost

#### Location

Republic of Karelia, Medvezhjegorskij Region

#### Inscription

1990

#### **Brief description**

The Kizhi Pogost (or the Kizhi enclosure) is located on one of the many islands in Lake Onega, in Karelia. The complex comprises two 18th-century wooden churches and an octagonal clock tower, also in wood and built in 1862. These monumental constructions, set in an almost pristine lake environment, bear exceptional witness to both the art of carpentry and to an ancient model of parish layout dating from the time of the spread of the Orthodox Church in the region. The Kizhi Pogost still acts as a physical and spiritual landmark in harmony with the surrounding landscape.

## Date of ICOMOS approval of this report 6 March 2014

## 2 Issues raised

#### **Background**

The property was inscribed on the World Heritage List in 1990 on the basis of criteria (i), (iv) and (v). At the time of inscription the World Heritage Committee recommended that the "authorities concerned maintain the present balance between natural and built environment, since the introduction of new homes or wooden churches south of Kizhi Island alters the historical and visual characteristics of the site."

At the time of inscription, the property was surrounded by a 'secure zone' corresponding to the Reserve territory of the Kizhi State Open-air Museum which, according to the State Party, was to act as a buffer zone for the Kizhi Pogost. The extent of this area was ca 14,350ha but the boundaries were not defined by coordinates and not clearly described, and no area size was mentioned in the nomination dossier.

Due to this lack of clearness, since 2005 the World Heritage Committee has requested, at its 29<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup>, 32<sup>nd</sup>, 33<sup>rd</sup> and 34<sup>th</sup> Sessions, the State Party to provide an update on the status and determination of the buffer zone and, at its 36<sup>th</sup> Session, encouraged the State Party to submit a proposal for a buffer zone via the minor boundary modification procedure. In response to the Retrospective Inventory, the Russian Federation submitted the boundaries of the buffer zone, which, according to the State Party, corresponded to the protected zones of the World Heritage Property Kizhi Pogost as approved by the Order of the Ministry of Culture of the Russian Federation n. 1268 – 29 December 2011 and encompassing an area of 9,990ha.

At its 37<sup>th</sup> Session (Phnom Penh, 2013), the World Heritage Committee took note of the clarifications made by the States Parties concerning the boundaries of their properties, including Kizhi Pogost.

## Modification

The formal request for minor boundary modification concerns only the modification of the boundaries of the buffer zone as determined within the retrospective inventory process and does not alter the inscribed property.

The State Party explains that the boundaries of the buffer zone as clarified in 2013 corresponded to those of the World Heritage Property protected zones as defined by the above mentioned Order n. 126 – 29 Dec 2011, and reduced in respect to the 'secure zone' schematic perimeter contained in the nomination dossier.

The 2013 buffer zone does not fully guarantee the protection of the landscape setting of the Kizhi Pogost, due to deforestation attempts outside the property but within the original 'secure' or buffer zone included in the nomination dossier. At present, the Museum Reserve has succeeded in halting deforestation activities but reinstating the original buffer zone would strengthen the protection of the inscribed property.

Hence, with this minor boundary modification request, the State Party proposes to:

- reinstate the original buffer zone as it was set out in the nomination dossier (14,350ha);
- further slightly modify the boundaries of the original buffer zone through the inclusion of two additional areas of Bolshoy Klimenetskiy Island (590ha), to increase the size to 14,940ha.

The buffer zone of the inscribed property includes the Island of Kizhi, the waters of Lake Onega adjacent to the Island, the neighboring islands and skerries and part of the mainland.

The proposed expanded buffer zone includes 48 villages, out of which only 14 are still inhabited, part of the shores of the Zahonezhie Peninsula, and Volkostrov, Shunevsky, Eglov, Uimy Islands, amongst others.

The State Party holds that an important attribute of the Outstanding Universal Value of the inscribed property is represented by its historical setting; the territory covered by the buffer zone exhibits multiple historical cultural layers and a distinctive historical and ethnocultural character.

According to the State Party, the enlarged buffer zone (14,940 ha) will improve the protection of the property and of its historical and cultural landscape through state regulation and legal mechanisms.

Land use and planning regulations have been established in the protection zone (buffer) so as to ensure that building and development activities are carried out taking into account the Outstanding Universal Value of the property.

The State Party reports that land management is regulated for each component of the protected zone of the World Heritage Property and restrictions on use are included in the Real Estate Cadastre. The Museum Reserve has submitted a request for plots of land to be registered for perpetual recreational use, so as to ensure the conservation of old-growth forests as the setting of the World Heritage Property.

With regard to management implications, the State Party informs that the management plan has been fully revised during 2013 and the scope of its latest version encompasses the original buffer zone as presented in the nomination dossier.

ICOMOS thanks the State Party for the efforts made to strengthen the protection of the property through the definitive clarification of the boundaries of the buffer zone and the reinstating of the original perimeter as submitted in the nomination dossier as well as the expansion to include a further 590ha comprising Bolshoy Klimenetskiy Island.

While the reasons for the minor boundary modification proposal are clear, ICOMOS observes that the following have not been adequately explained:

- the reasons why the additional 590ha should be included in the buffer zone and how they would contribute to the protection of the inscribed property;
- a clear cartographic identification of the proposed 590ha extension;
- the rationale and textual description for the precise delimitation of the boundaries of the proposed buffer zone as a whole, since this was not provided at the time of inscription. In particular the route followed by the boundaries between each coordinate point (natural features, administrative limits, etc.) is not clear, both on the land and on the

ICOMOS also notes that the boundaries of the buffer zone contained in the updated management plan do not correspond to the present proposed buffer zone boundaries nor to the perimeter as clarified through the Retrospective Inventory.

Additionally, ICOMOS considers that there is a need to explain in more detail what are the protective regulatory and planning provisions in place for the expanded proposed buffer zone and how these protect Kizhi Pogost. The State Party in fact asserts that they cover the World Heritage Protected zone, which apparently coincides with the one defined through Order n. 126 – 29 Dec 2011.

At this stage, therefore, ICOMOS considers that it is not clear by which means the proposed expanded buffer zone will be protected. Further details are also needed regarding the specific nature of these provisions and the regulatory and management mechanisms in place to ensure that the newly proposed buffer zone acts as an effective layer of protection for the property.

### 3 ICOMOS Recommendations

## Recommendation with respect to inscription

ICOMOS recommends that the examination of the proposed minor modification to the buffer zone of Kizhi Pogost, Russian Federation, be **referred back** to the State Party in order to allow it to:

- Submit a complete set of maps that also identify the additional 590ha of proposed extension to the buffer zone which are either topographical or cadastral and which are presented at a scale which is appropriate to the size in hectares of the property and sufficient to show clearly the detail of the current boundaries and the proposed changes;
- Explain the reasons for the inclusion of the plots of land on Bolshoy Klimenetskiy Island in the buffer zone, in relation to its protective function for the inscribed property;

- Clarify and explain in detail through which legal and planning regulatory measures the proposed extended buffer zone will guarantee the effective protection of the property and how these would prevent deforestation and other possibly harmful activities:
- Amend the above mentioned WHP Protected Zone Kizhi Pogost as approved by the Order of the Ministry of Culture of the Russian Federation n.
- 1268 29 December 2011 in order to make it correspond to the proposed extended buffer zone;
- Elaborate measures to ensure the protection of the visual qualities of the landscape setting of the property and the views that can be enjoyed from and towards it:
- Ensure that the perimeter of the newly proposed boundaries of the buffer zone be incorporated into the 2013 Management Plan.

## **Decision Adopted: 38COM 8B.55**

The World Heritage Committee,

- 1. Having examined Documents WHC-14/38.COM/8B.Add, and WHC-14/38.COM/INF.8B1.Add,
- 2. Refers the examination of the proposed minor modification to the buffer zone of **Kizhi Pogost**, **Russian Federation**, back to the State Party in order to allow it to:
  - Submit a complete set of maps, either cadastral or topographical, that also identify the
    additional 590 ha of proposed extension to the buffer zone and which are presented at
    a scale which is appropriate to the size in hectares of the property and sufficient to
    show clearly the detail of the current boundaries and the proposed changes;
  - 2. Explain the reasons for the inclusion of the plots of land on Bolshoy Klimenetskiy Island in the buffer zone, in relation to its protective function for the inscribed property;
  - 3. Clarify and explain in detail through which legal and planning regulatory measures the proposed extended buffer zone will guarantee the effective protection of the property and how these would prevent deforestation and other possibly harmful activities;
  - 4. Amend the above mentioned WHP Protected Zone Kizhi Pogost as approved by the Order of the Ministry of Culture of the Russian Federation 1268 29 December 2011 in order to make it correspond to the proposed extended buffer zone;
  - 5. Elaborate measures to ensure the protection of the visual qualities of the landscape setting of the property and the views that can be enjoyed from and towards it;
  - 6. Ensure that the perimeter of the newly proposed boundaries of the buffer zone be incorporated into the 2013 Management Plan.

## **ANNEX H**

## Recommendations of the 2013 Reactive Monitoring Mission (1-6 April 2013)

- The 2013 mission repeats the (request of the 31COM 2007, 32COM 2008, 33COM 2009; 34COM 2010; 36COM 2012) following the recommendations of the Reactive Monitoring Mission and Advisory Mission in 2011 that the State Party be requested to provide a detailed report on progress and measures in preparing the proposed Management Plan, tourism strategy and buffer zone for presentation to the World Heritage Committee.
- The mission recommends that the State Party submit the proposed Management Plan for review by the World Heritage Centre and the Advisory Bodies before finalization by the State Party.
- The mission recommends that a sustainable tourism strategy be prepared as an urgent matter as a part of the Management Plan strategy for guidance for all actions and development. The tourism strategy must include a detailed assessment of the expected impacts and compatibility of all development with the OUV of the property.
- The mission recommends that in order to preserve the Outstanding Universal Value of this property, it is essential that the implementation of the restoration project continue without interruption. Delays will result in further deterioration of the church, loss of momentum and continuity.
- Previous missions and the World Heritage Committee have requested that Guiding Principles be developed to guide decision making in the conservation project which are rooted in the Outstanding Universal Values of the property. The Advisory Bodies have developed technical guidelines for log repair to guide technically sound, compatible repair work. Caution about multiple repairs and the use of adhesives were particularly noted. The museum presented draft "Guidelines for Intervention" for review by the mission. While this is a positive step these guidelines do not fully consider the OUV of the property. Refer to the comments in Annex 5.
- The mission recommends that when contracting the work, the State Party investigate all possible means to ensure all bidding contractors have appropriate skills and quality workmanship. It is also essential that the capacity of the museum carpentry staff be protected and maintained inside the framework of Russian tendering law. 8
- The 2013 mission recommends that a capacity building training in Management Planning for World Heritage Sites be developed and made available to all WHS in the Russian Federation.
- The 2013 mission repeats the (request of the 31COM 2007, 32COM 2008, 33COM 2009; 34COM 2010; 36COM 2012) following the recommendations of the Reactive Monitoring Mission and Advisory Mission in 2011 that the State Party be requested **to halt** all future construction development for the WHS and its buffer zone including visitor and administration facilities and infrastructure projects as roads and wharfs until the Management Plan has been completed and approved by the World Heritage Committee. Previous missions were not briefed on development projects recently completed or currently underway. All development projects must be completed with an adequate assessment of their immediate and cumulative impacts on the Outstanding Universal Value including the environmental protection of the WHS. Use of already existing buildings should always be seriously considered.
- The mission recommends that the State Party submit draft documents on buffer zone boundaries (its function related to the OUV and legal protection) and adjoining protected areas for review by the World Heritage Centre and the Advisory Bodies before final approval by the State Party. The buffer zone submission should be prepared in accordance with the Operational Guidelines paragraph 163 165.
- The mission recommends that the State Party implement the fire protection and security plans as presented to the 2011 mission because these will improve the level of protection and the quality of the environment near the World Heritage Site. Due to the added risk of fire during construction work the mission repeats its recommendation that the State Party consider adding an indoor suppression

system in the churches and the Bell Tower. A comprehensive risk management strategy for the WHS and its buffer zone is suggested to include environmental and overall sustainability aspects.

- Given that the next 18 months will be a critical period if the Outstanding Universal Value of Kizhi Pogost is to be protected, the 2013 mission recommends that there be a follow-up mission in 2014 in order to assess the continuity of the conservation project (5th tier) and the development and implementation of the management plan and tourism strategy in a timely fashion.
- The mission also recommends that regular uploading of project photos to the web site as previously set up for the purpose should continue as a very effective monitoring tool for the Advisory Bodies and the World Heritage Centre.
- The mission recommends the State Party provide the next annual detailed "State of Conservation Report" before the next mission. This report should address the status of the various projects, all corrective measures and implementation of the management plan and tourism strategy.

#### **ANNEX I**

## Decision of the 37<sup>th</sup> Session of the World Heritage Committee (Phnom Penh, 2013)

#### 37 COM 7B.80

#### Kizhi Pogost (Russian Federation) (C 544)

The World Heritage Committee,

- 1. Having examined Document WHC-13/37.COM/7B.Add,
- 2. Recalling Decision 36 COM 7B.83, adopted at its 36th session (Saint-Petersburg, 2012),
- 3. <u>Notes</u> the progress made by the State Party in the conservation and protection of the Church of the Transfiguration and on the Church of the Intercession and <u>urges</u> it to sustain these efforts in timely manner and secure the necessary resources to ensure that no further loss of fabric and design features, which could constitute a threat to the property, occurs;
- 4. <u>Takes note</u> of the steps the State Party is making towards developing legal measures for the protection of World Heritage cultural properties;
- 5. <u>Also takes note</u> of the recommendations made by the April 2013 reactive monitoring mission to the property and also urges the State Party to implement its recommendations, in particular:
- a) Revise the management plan to ensure that the conservation and protection of attributes that convey the Outstanding Universal Value (OUV) of the property drive decision-making; the revised Management Plan should include regulations for land use and for new developments, provisions for the management of the agricultural landscape, a sustainable tourism strategy, risk preparedness measures and measures for monitoring the state of archaeological resources,
- b) Halt all proposed new developments in the buffer zone and setting of the property, including visitor and administration facilities, until the Management Plan has been revised and until Heritage and Environmental Impact Assessments have been undertaken to take into account the expected impacts and compatibility of development with the OUV of the property,
- c) Enhance the implementation of the fire protection and security plans to improve the level of protection and quality of the environment at the property,
- d) Finalise the development of Guiding Principles for the restoration projects that relate the conservation work to the key attributes of the property;
- 6. <u>Requests</u>, in accordance to Paragraph 172 of the *Operational Guidelines*, the State Party to submit the project proposal, technical specifications and heritage and environmental impact assessments, for the Office and Public Centre of the Kizhi Museum and for any other planned development projects, for review by the World Heritage Centre and the Advisory Bodies prior to committing to its implementation;
- 7. <u>Also requests</u> the State Party to submit to the World Heritage Centre for review by the Advisory Bodies the draft Management Plan in three printed and electronic copies;
- 8. <u>Further requests</u> the State Party to invite an ICOMOS advisory mission in early 2014 to assess the progress made in the restoration works and on the implementation of the above;
- 9. Requests furthermore the State Party to submit to the World Heritage Centre, by **1 February 2014**, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 38th session in 2014.

#### **ANNEX J**

#### 2014 ICOMOS technical review of Management Plan

#### **ICOMOS Technical Review**

Property Kizhi Pogost

State Party Russian Federation

Property ID 544
Date inscription 1990

Criteria (i), (iv) and (v).

Project Management Plan 2014-2020

#### **General Comments:**

The draft Management Plan (MP) is a long and complex document which restates earlier documents and repeats general goals and objectives. It restates the goal of protecting Outstanding Universal Value in a sustainable manner without clear measureable goals and achievements and how this will be done.

The document refers to several topics throughout the plan and at times it is difficult to connect them.

The MP refers often to visual character, panoramas, site lines and other visual aspects of the WHP as key aspects of OUV (for example in 2.3.2). More attention to "authenticity" over appearance should be emphasized.

The addition of Heritage Impact Assessment is a positive change but we really need to know more about the criteria for such an analysis. Examples are available and these should be provided. On the other hand the attention given to monitoring and maintenance as conservation activities needs further clarification.

Part 10, Action Plan is comprehensive but does not yet address concerns about the tourism strategy particularly the siting and scale of infrastructure to support an as yet undefined program of site visitation. Expanding the visitor season and the type of activities is not in question but the scale of infrastructure (and associated HIA) is.

The MP 2014 is much improved over the 2012 draft.

#### **Specific Comments:**

P9: The following 3 documents are referred to in the MP and are described as crucial input to the MP but are not included. Although they have been requested they have not been seen by the advisory body (Kizhi Museum Development Concept, Zaonezhsky tourist cluster development concept, Velikaya Guba development master plan). All refer to land use within the buffer zone and presumably define responses to key goals.

P12-13: Studies of the buffer zone are planned for 2014-15. It is not clear how the text in the draft MP relates to the minor boundary modification requested by the State Party.

P35: Here the MP states that the Master plan for the village of Velikaya Guba is in development and will protect the OUV of this area. As a community within the buffer zone it is not clear how this plan is informed by the MP and the OUV - what are the issues, opportunities and threats related to it? Integration is required here.

Part 5 Strategic Goals p40+: These are all appropriate goals although they tend to be rather general and "broad brush". See references to Action Plan, below.

Part 6 Conservation of OUV p41+: This part includes a description of several aspects of the site and in various levels of detail. ICOMOS suggests that the goals be described by a series of goal statements such as "Conservation of OUV is achieved when\_\_\_\_\_". Some individual goals will be difficult to achieve such as those in the 2<sup>nd</sup> group. The meaning of para. 6.1.1 is unclear.

ICOMOS has been requesting development of conservation guidelines for some years. While Para 6.1.2 includes reference to such Guidelines it refers to the known charters (Venice Charter, etc.). The MP Guidelines need to refer specifically to the application to conservation guidelines for the Kizhi Pogost structures and site.

Guiding Principles 2, p45: Does this mean temporary structures will be removed? What about project related structures within the zone?

P48: Reference is made to ongoing use and occupancy of the Church of the Intercession. Earlier projects included spraying the interior with sodium pentachlorophenate. The implications of this need to be understood before exposing public to toxic materials.

Part 6.6.2, p59: Before conserving visual communications and panoramas" there needs to be an inventory of these features and characteristics. The MP does not refer to removal of obsolete, incompatible unneeded infrastructure and equipment (debris).

Part 7, p62: The main activities are positive as is the introduction of HIA within the planning process for individual projects. What are the criteria for HIA?

Part 7.1, p63: Threats due to tourism (increase or decrease) need to be expressed in more neutral terms. Perhaps summer months' visitor numbers are adequate while shoulder seasons are not. All increases require more compatible infrastructure.

Part 7.1.2 The MP identifies several "offerings" but does not mention marketing studies to determine who the visitors might be and how to appeal to them.

Several of the priorities could be achieved through rehabilitation of existing facilities (village buildings for example) rather than building new.

Part 7.2 p68: Natural environment or cultural landscape?

Part 10 Action Plan: The Action Plan

Part 10.1 and 2, p87: The preventative maintenance and monitory programs described elsewhere in the plan need to be part of 10.1.

Part 10.5 and 17, p88: Staff housing – this action item should consider adaptive reuse of existing buildings rather than introduction of more buildings to the island. That might be intended but is unclear.

Part 10.3.34, p91: Velikaya Guba master plan is an action plan item but the MP document does not clarify the issues, goals and parameters of this part of the plan.

Appendix 13 contains a SWOT analysis which is very useful starting element to the MP.

Risk Management Plan: A risk management plan is one element which the WHC requested be included in the MP. The attached document is dated 2010 and attached to the MP as appendix 15. It includes a comprehensive identification, assessment and mitigation and protective measures. 10.5.14 to 16 of the Action Plan refers to some initiatives of the RMP but not all.

#### **Recommendations:**

The Management Plan and the Action Plan within it goes some way toward meeting Decision 5a) of 37COM. However it continues to be unclear and weak on the subjects of land use regulations, new development landscape management and a tourism strategy.

Decision 5b) Buffer zone development is still being considered and planned without Heritage and Environmental Impact Assessment. For example the Master Plan for Velikiya Gub is an item in the action plan while its goals and parameters are unclear.

ICOMOS, Paris April 2014

#### **ANNEX K**

#### Report by Dr.-Ing. Jens Kickler

#### Konzept der Aussteifung- und Verstärkung an der Christi Verklärungskirche

Erläuterungen zu den Ausführungen auf der Konferenz ICOMOS vom 01.07 – 05.07 auf Kizhi.

#### 1. Allgemeines und Hintergrund

Insgesamt hat sich die Struktur und Konstruktion der Verklärungskirche auf Kizhi als standsicher erwiesen, wobei sich während der gesamten Standzeit (ca. 300 Jahre) konstruktiv bedingte Schwächen zeigten. Bei einigen grundsätzlichen Schwachpunkten erfolgten kontinuierliche Reparatur- und Verstärkungsmaßnahmen während der gesamten Standzeit. Folgende Bereiche zeigten während der Standzeit Schwächen bzw. sind nach heutigem technischem Kenntnisstand verbesserungsbedürftig:

- 1. Fundamente (bereits erfolgt)
- 2. Horizontale Steifigkeit (teileweise sehr große Schrägstellung Folgeschäden)
- Horizontalverschiebungen im Bereich der Deckenkonstruktion (Schäden wurden mehrfach während der Baugeschichte instandgesetzt - die Ursache wurde nicht beseitigt)
- Krafteinleitung aus dem oberen verjüngten Gebäudeteilen oberhalb der runden Deckenkonstruktion (tragenden Balken weisen sehr hohe Durchbiegungen (Verstärkungsmaßnahmen wurden seit den 80ziger Jahren in vielen unterschiedlichen projektiert)
- 5. Horizontale Aussteifung der oberen Gebäudeteile (Verstärkungen erfolgen auch schon in früheren Nutzungsphasen)

#### Zu 1.:

Die gesamte Gründung/ Fundamente wurden entsprechend dem aktuellen Kenntnisstand erneuert.

#### Zu 2 .:

Die horizontale Steifigkeit des gesamten Bauwerks ist konstruktionsbedingt gering. Aufgrund der großen Höhe für ein Bauwerk die Blockbauweise und den bis zum Beginn der Restaurationsarbeiten bereits vorhandenen Schädigungen der tragenden Holzelemente führte dies im Zusammenwirken mit Fundamentabsenkungen und zu starken Verschiebungen und Schiefstellungen in der Konstruktion. Es muss hierbei festgehalten werden, dass dies für eine derartig aufwendige Konstruktion als altersbedingt kaum vermeidbarer Prozess angesehen werden muss. Dies wurde im Laufe der bisherigen Geschichte dieses Bauwerks durch unterschiedliche Maßnahmen versucht aufzuhalten oder zu reduzieren. (Einbau von Horizontalaussteifungen, Verkleidung der Außenwände, vertikale Verstärkungen). Alle diese Maßnahmen hatten aber nur eine Reduzierung oder Verzögerung dieser Verschiebung zu Folge, so dass festgehalten werden muss, dass ohne weitere zusätzliche Maßnahmen sich erneut Schiefstellungen und Verschiebungen einstellen werden, wobei dies etwas schneller als in den vorangegangenen 300 Jahren von statten gehen wird, da ein Großteil der Substanz im Rahmen der Restauration erhalten werden kann (es werden nur ca. 20% – 25% ausgetauscht), Weiterhin werden die neu hinzugefügten Elemente oder Bereich handwerklich exakt an die alten Bauteile angepasst. Die führt insgesamt dazu, dass das Bauwerk aufgrund der über einen langen Zeitraum bereits vorhandenen Verformungen in die vor der Rekonstruktion vorhandenen Positionen (also Schiefstellung) zurückfallen will (in die gewohnte Lage). Die kann nur durch zusätzliche Maßnahmen zwischen den einzelnen Elementen erreicht werden, welche ein zurückfallen in die gewohnten Position verhindern. Für Elemente die bereits jetzt wieder in die Schiefe Lage zurückgegangen sind bedeutet dies, dass diese Verformungen

zurückgesetzt (durch äußere Einwirkungen – Zugbänder, Verspannungen etc.) werden müssen und danach eine Fixierung der Bauteile untereinander erfolgen muss. Nach einer gewissen Zeitspanne wird sich diese stabilisierte Lage als dauerhaft einstellen.

#### Zu 3.:

Die gesamte Deckenkonstruktion weist einen grundsätzlichen Fehler auf, der zur Zeit der Erbauung noch nicht erkannt werden konnte, da diese Kenntnisse noch nicht vorlagen. Die Decke muss ähnlich wie bei einer Kuppel zu Vermeidung des Horizontalschubs im Auflagerbereich ringförmig geschlossen werden. Die Verstärkungen der Ringkonstruktion führt dauerhaft zu Vermeidung der über Jahrhunderte festgestellten Verschiebungen und Schädigungen der Außenwände in diesem Bereich.

#### Zu 4.:

Dieses Problem wurde seit den 80ziger Jahren eines der zentralen Probleme betrachtet und hierzu wurden umfangreiche Lösungsvorschlage gemacht. Fast alle Lösungsvorschläge haben zusätzliche Tragelemente vorgeschlagen, welche das ursprüngliche Tragkonzept der Gesamtkonstruktion grundsätzlich verändern und damit den Feuchtebedingten Höhenschwankungen der Gesamtkonstruktion entgegenwirken und u stark geänderten Lastzustanden in einzelnen Bauteilen führen, welche bisher nicht gegeben waren. Dies sollte unbedingt vermieden werden. Eine Verstärkung der Brückenkonstruktion ist aber unbedingt erforderlich, da die nur auf handwerklichen Erfahrungen beruhenden Konstruktionen sich als sehr schwach insbesondere unter dem Aspekt der Verformungen herausgestellt hat. Eine Nachrechnung dieser Konstruktion bestätigt die vorhandenen Verformungen und zeit rechnerische Überlastungen. Die vorgeschlagene Verstärkung vermeidet dies ein einfacher Weise mit einem Minimum an Eingriff in die vorhandenen historischen Elemente. Andere Varianten wurden ebenfalls geprüft und sind möglich haben aber alle einem größeren Eingriff in die Originalsubstanz zur Folge.

#### Zu 5.:

Die vorhandenen horizontalen Aussteigungselemente (Verstrebungen die bereits nachträglich (ca. 1850) eingebracht wurden, zeigten, dass das grundsätzliche Problem erkannt wurde, leider gaben die eingebauten Streben den umliegenden Elementen nicht die Möglichkeit der Höhenänderungen in Folge Quellen und Schwinden. Zum jetzigen Zeitpunkt wird deutlich, dass die eingebauten Verstrebungen Vertikallasten bekommen, welches zu Schäden in den umliegenden Blockrundhölzern geführt hat.

#### 2. Folgerungen:

Der Punkt 1 ist abgeschlossen, es sollte nur noch berücksichtig werden, dass Teile der Fundamentkonstruktion aus dem inneren Stahlgerüst für die Lastabtrag des Holzbodens und zu Versteifung des unteren Bereichs bis zur Höhe des Fußboden mit genutzt werden sollte.

Der Punkt 2 muss möglichst zeitnah entschieden werden, da sich die bereits jetzt vorhandenen Verformungen nur mit sehr großem Aufwand rückgängig machen lassen und dies mit zusätzlicher Auflast immer schwieriger werden wird. Der vorliegende Vorschlag geht von einer Verbindung (Vernadelung) der übereinander liegenden Rundhölzer aus. Dies Verbindung soll mit möglichst dünnen Vollgewindeschrauben erfolgen (d=8mm), so dass nur 6mm große Löcher in die Hölzer eingebracht werden müssen. Dies kann in Anbetracht des Durchmessers der Rundhölzer (ca. 350mm) als Minimalinversiev bezeichnet werden. Die Schrauben haben ein selbstschneidendes Gewinde, so dass eine Spaltgefahr durch die eingedrehten der Schrauben ausgeschlossen werden kann. Die Schrauben werden mit einem flachen Neigungswinkel (ca. 30°) eingebaut. Damit wird gewährleistet, dass es zu keine

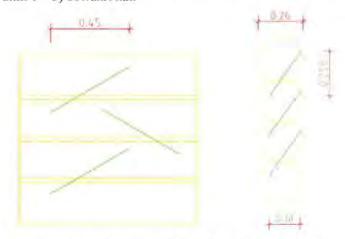
Behinderung der Quell- und Schwindverformung in vertikaler Richtung kommt. Der flache Neigungswinkel gewährleistet ebenfalls, dass die horizontale Verschiebung der Hölzer untereinander verhindert wird – welches zu den Verformungen der Gesamtkonstruktion beiträgt. Dieses Konzept verbindet sehr gut die Anforderungen die an ein derartiges Denkmal gestellt werden:

- Die Eingriffe beschränken sich auf ein absoluten Minimum (es nur sehr kleine Bohrungen in die historische notwendig)
- Die Eingriffe sind reversibel, die Schrauben können ohne Einfluss auf die Gesamtkonstruktion wieder herausgeschraubt werden, es bleiben nur 6mm dicke Löcher welche im Vergleich zu den natürlichen Längsrissen aufgrund des Trocknungsprozesses bei Rundhölzer als annähernd schädigungsfrei bezeichnet werden müssen.
- Der Einbau muss nur dort erfolgen, wo es auch zu Verschiebungen, welche die Gesamtstabilität beeinflussen vorgenommen werden, in den übrigen Bereichen, kann auf Eingriffe völlig verzichtet werden.
- Die Verstärkung erfolgt so, dass das ursprüngliche Tragkonzept der Kirche vollständig erhalten bleibt und nur in den Bereichen die aufgrund des Alterungsprozesses eine Verstärkung benötigen, verstärkt werden.
- Da die Schrauben jederzeit wieder entfernt werden können, steht dieser Art der auch ev. zukünftig notwendigen Restaurationsarbeiten nicht im Wege.

Die Punkte 3 – 5 werden in Übereinstimmung mit den vorliegenden Planungen erfolgen. Hierbei sind spätere Anpassungen noch möglich und es besteht im Vergleich zum Punkt 2 keine derartige Dringlichkeit der Entscheidung, da dies auch zu einem späteren Zeitpunkt noch konkretisiert werden kann. Auf eine detaillierte Erläuterung dieser Bereich wird im Rahmen dieser kurzen Stellungnahme verzichtet.

#### 3. Zusammenfassung

Im Vergleich zu anderen Aussteifungsvarianten, die im Vorfeld und auch während der Konferenz diskutiert stellt dies die Möglichkeit mit den geringsten Eingriffen in die historische Substanz dar und erhält auch das ursprünglich Tragkonzept. Weiterhin ist es lokal anwendbar und verhindert damit eine grundsätzlichen Eingriff in die vorhandene Tragstruktur, welche sich bis auf die letzten 40 Jahre (mit kleinen Einschränkungen sich Punkt 1 – 5) bewährt hat.



Vernadelung/ Verstärkung mit Schrauben d=8mm in den Wänden



SPAX International GmbH & Co. KG Postfach 1141 D-58240 Ennepetal

Ingenieurbüro Dr. Kickler + Martens z.Hd. Herrn Prof. Dr.-Ing. Jens Kickler Wedekindstraße 9 30161 Hannover Ihnen schreibt: Micha Hochstrate Telefon: +49-(0) 2333-799-144 Telefax: +49-(0) 2333-799-199 Micha.Hochstrate@spax.com

11.07.2014 / Vertrieb

### Sanierung Kirche Kizhi Pogost – Einsatz von SPAX Schrauben Ihre Anfrage vom 10.7.2014

Sehr geehrter Herr Prof. Dr. Kickler,

vielen Dank für ihre Anfrage.

Zu dem Thema mögliche Rissbildung im Holz bei Verwendung von SPAX Schrauben kann ich ihnen mitteilen, dass bei Vorbohren des Holzes nicht mit einer Rissbildung im Holz zu rechnen ist.

Ferner ist durch die planmäßige axiale Belastung der Schrauben nicht mit einer Rissbildung zu rechnen, da – im Gegensatz zu einer Abscherbeanspruchung - keine Spannungen senkrecht zur Holzfaser entstehen, die die Tendenz haben das Holz aufzuspalten.

Geeignete Vorbohrdurchmesser entnehmen sie bitte unserer technischen Dokumentation die ihnen vorliegt.

Mit freundlichen Grüßen

SPAX International GmbH & Co. KG



#### Translated version of above report and letter:

# Measures for reinforcement and rigidity at the Church of the Transfiguration

Comments on the presentation at the ICOMOS conference 01.07.-5.07. 2014 on Kizhi

#### 1. General and Background

Overall the structure and construction of the Church of the Transfiguration has proven to be stable, however some constructively weaknesses became apparent throughout the building's lifetime (approx. 300 years). Throughout its overall lifetime, measures for repair and reinforcement have been carried out continuously at some weak spots. The following areas have shown weaknesses during the building's lifetime or are in need of improvement according to today's state of technical knowledge:

- 1. Foundations (already implemented)
- 2. Horizontal rigidity (very high tilt in some parts consequential damages)
- 3. Horizontal shifts/displacement within the area of ceiling construction (multiple repairs of damages throughout the building's history however their cause was not eliminated)
- 4. Introduction of forces from the upper tapered building parts above the round ceiling construction (load-bearing beams show very high deflexions-various measures for reinforcement have been in planning since the 1980s)
- 5. Horizontal bracing of the upper building parts (reinforcements were implemented in earlier phases of building use already)

#### Ad 1.:

The complete building foundation has been replaced in accordance with current state of knowledge.

#### Ad 2.:

Determined by its construction, the horizontal rigidity of the overall structure is low. Due to its high building height, log building method and damages of the bearing timber elements pre-existing to restauration work, this has, in combination with the settling of foundations, led to heavy shifting and tilting in the construction. It should be noted that this has to be considered a virtually unavoidable agerelated process for such an elaborate construction. In the course of the building's history, several measures were applied to try and halt or reduce this process (installation of horizontal and vertical reinforcements, cladding of exterior walls). All these measures resulted only in reducing or retarding this shift and tilt, therefore it should be noted that, unless additional measures are implemented, shifting and tilting of the construction will re-occur. This process will be faster than in the previous 300 years, as the better part of the building fabric can be preserved during the restauration (only 20-25% of the building fabric will be replaced). New elements and areas will continue to be crafted precisely to fit to older parts of the building. This will in total induce the building to fall back into its position before reconstruction (i.e. its usual inclined position), because of the deformations that have pre-existed over a long period of time. Additional measures in between the individual building elements are needed to prevent the construction from re-assuming its usual position. Deformations in building elements that have re-assumed their skewed position have to be re-set (by external measuresbeam ties, bracing, reinforcement, etc.), before fastening building parts into position. After a certain period of time, this stabilized position will become permanent.

#### Ad 3.:

The complete construction of the ceiling shows a principle error, which was not understood during the building's construction due to the state of knowledge at this point in time.

To avoid horizontal thrust in the supports, the ceiling will have to be closed off in a ring shape, similar to a cupola. Reinforcements of this ring construction will lead to permanently avoiding the deformations and damages on exterior walls that have appeared over the centuries.

#### Ad 4.:

Since the 1980s this has been considered as an essential problem and comprehensible attempts at solutions have been proposed. Almost all of these proposed the addition of load-bearing elements, which would fundamentally change the original load-bearing concept of the structure as a whole, in this way counteracting its humidity-related height variations and introduce significant changes of load distribution in individual building parts. This should be avoided in any way.

However, reinforcing the construction of the bridges is imperative. These constructions were based on craft traditions and have proven to be very weak, especially in respect of deformations. A recalculation of this construction has confirmed existing deformations and overloading over time. The proposed reinforcement avoids this with a simple method and minimal intervention in the existing historic elements. Alternative methods have been revised and are possible, but will lead to more extensive intervention in the original building fabric.

#### Ad 5 .:

Existing horizontal reinforcements installed around 1850, show that the basic structural problems have been addressed previously. Unfortunately, the installation of these braces constrained height variations of the surrounding elements related to expansion and contraction due to swelling and shrinking. Today it is obvious that these added reinforcements are receiving vertical loads, which has caused damage in the surrounding logs.

#### 2. Implications

Item 1 has been concluded, however, it should be taken into consideration, that parts of the foundation structure from the interior steel scaffolding should be used for load distribution of the timber flooring and for reinforcement of the lower zones up to the level of the flooring.

Item 2 should be decided as promptly as possible, as existing deformations can only be reversed with considerable effort, and any additional load over time will complicate the process. The present proposal suggests fixing logs lying on top of each other. This fixing should be executed with threaded screws (as fine as possible, d=8mm), to limit drill hole size to 6mm. This may be, in regard of the logs diameter (ca. 350mm), considered as a minimal intervention. Self-tapping screws are used to eliminate splitting. Screws are installed at a flat angle (approx. 30 degrees). This ensures that vertical deformation related to expansion and contraction will not be obstructed. The flat angle will prevent horizontal shifting among the logs, which contributes to deformation of the structure as a whole. This concept efficiently combines the demands on heritage structure of this kind:

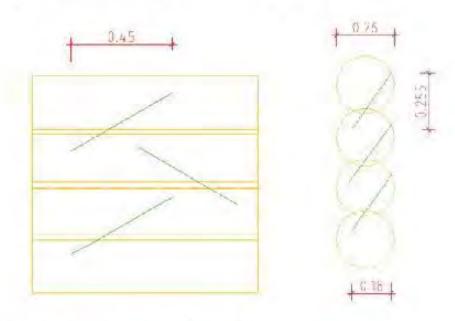
- interventions are limited to an absolute minimum (very fine drilling in the historic timber)
- interventions are reversible; screws may be removed with no impact on the structure as a whole. The remaining 6mm drill holes can be regarded as approximately non-damaging in comparison to natural longitudinal cracks in the timber caused by desiccation
- installation is limited to areas where displacements influencing overall stability occur, no intervention is necessary in the remaining areas.
- the proposed reinforcements preserve the original structural concept of the church, and are limited to areas in need of reinforcement due to aging processes.
- screws may be removed at any time and are thus not impeding any restauration works necessary in the future.

Items 3-5 will be implemented in accordance with existing planning. In this connection, adjustments at a later point are possible, in comparison to item 2 decision-making is less urgent and may be put into concrete terms at a later point.

#### 2. conclusion

The proposed method requires minimal intervention in historic fabric and preserves the original structural concept compared to alternative methods for reinforcement discussed prior and during this conference. It can be applied locally, thus preventing a fundamental intervention into the existing load-bearing structure, that has, apart from minor restrictions, see item 1-5, been proven satisfactory until 40 years ago.

3



Fixing/ reinforcement with screws d=8mm in the walls.



Translation of the letter from SPAX, producer of screws:

Ingenieurbüro Dr Kickler + Martens z.Hd. Herrn Prof Dr. \_Ing. Jens Kickler Wedekindstrasse 9 30161 Hannover

Rehabilitation of Church Kizhi Pogost – Use of SPAX screws Your request of July 10<sup>th</sup> 2014

Dear Mr. Prof. Dr. Kickler,

Thank you for your request.

Concerning the topic of the possibility that the use of SPAX screws may result in cracking:

Formation of cracks in the wood is not expected when predrilling the timber. Furthermore, cracking due to axial loading of screws as planned is not to be expected, as- in contrast to shear stress- there is no development of tensions perpendicular to the wood fibre, which tend to crack the timber. Please refer to our technical documentation for appropriate diameters for predrilling.

Best regards SPAX International GmbH & Co. KG

#### **ANNEX L**

#### Statement on entrance zone constructions

Директору

музея-заповедника «Кижи»

Нелидову А.В.

#### Уважаемый Андрей Витальевич!

В ответ на Ваш запрое поясняем следующее.

В соответствии с положениями Гражданского кодекса Российской Федерации к педвижимому имуществу относятся объекты, прочно связанные с землей, и перемещение которых на новое местоположение без несоразмерного ущерба их назначению невозможно.

Объектом капитального строительства, согласно Градостроительному кодексу Российской Федерации, является здание, строение, сооружение, объекты незавершенного строительства, за исключением временных построек, киосков, навесов и других подобных сооружений.

Под капитальным ремонтом объектов капитального строительства в градостроительном законодательстве понимается замена и (или) восстановление строительных конструкций объектов капитального строительства или элементов таких конструкций, за неключением несущих строительных конструкций, замена и (или) восстановление систем инженерно-технического обеспечения и сетей инженерно-технического обеспечения объектов капитального строительства или их элементов, а также замена отдельных элементов несущих строительных конструкций на аналогичные или иные улучшающие ноказатели таких конструкций элементы и (или) восстановление указанных элементов.

Согласно бухгалтерской и налоговой политике музея-заповедника «Кижи» постройки, расположенные во входной зоне, являются движимым имуществом учреждения, то есть не являются объектами капитального строительства.

Из принципа совместного голкования действующего законодательства следует, что выполняемые на постройках во входной зоне работы являются их капитальным ремонтом, поскольку процеходит замена и восстановление строительных конструкций и сетей инженернотехнического обеспечения. Перемещение ностроек на новое местоположение возможно без ущерба их назначению, поскольку, во-первых, прочная связь построек с землей отсутствует (установка на бетонную лагу), во-вторых, бревна срубов пронумерованы, и монтаж их в новом месте расположения не составит труда, в-третьих, сами постройки являются движимым имуществом, характер которого предполагает их практическое перемещение. Выдача разрешений на строительство не требуется в силу указанных выше обстоятельств.

Директор проектно-строительной компании «Илвес»,

заслуженный строитель Республики Карелия

Директор научно-производственного предприятия «Прорыв»,

заслуженный строитель Российской Федерации

Технический директор

ООО научно-техническое объединение «Крейт»

Bopomin M.)

Фрейдин В.Б.

Мажорин А.Г.

#### **ANNEX M**

#### Reference from the Museum on the issue of the Entrance Area

#### INFORMATION REFERENCE ON THE ISSUE OF ENTRANCE AREA ON KIZHI ISLAND

- In 2014, the Museum celebrates a very important event of the 300 anniversary of the Church of the Transfiguration. It is necessary to provide the possibilities for accommodating guests on Kizhi island and also for performing the anniversary related activities including several conferences.
- The temporary buildings were constructed in the entrance area more than 20 years ago. They almost fell in disrepair and did not comply with any of the regulations (sanitary, fire security, esthetics and so on).
- The entrance area of Kizhi Museum was under the great attention of ICOMOS/UNESCO missions during last several years. The State Party was recommended to submit the project for the entrance area to the WHC for the endorsement.
- 4. There were several variants of the entrance area projects developed during last several years. None of these projects was approved in all respective institutions i.e. in local and federal ones (the Ministry of Culture of RF) or in the international one (the WHC). Thus, by the 300 anniversary of the WHS the Museum had not any approved projects for the entrance area.
- 5. In this situation, the only option left was repairing the existing temporary buildings in the entrance area that were constructed more than 20 years ago. The repairs was performed under the condition of possibility to disassemble these buildings in the future after the celebration. The overall dimensions and materials were preserved during the repairs. The buildings are dismountable and have no links with the ground (no foundations). That is said, these are temporal buildings (the expert conclusion on this issue is applied).
- 6. In 2013, a frame-conception of the Kizhi Museum development was elaborated. The Kizhi Museum accepts and understands the importance of coordinating any development projects with the UNESCO, and this is why invited two competent ICOMOS experts especially for consultations regarding the project proposals for museum development.
  The invited experts are:
- Gisle Jakhelln (Norway), he is a chief architect, an ICOMOS member (Norway), President of Norway ICOMOS in 2008-2010, President of the Traditional Architecture Committee (CIAV), Vice-President of the ICOMOS Consulting Committee.
- 2) Olga Seven (Russia), she is an architect, an ICOMOS member (the Commission of the ICOMOS International Council). President of the Russian Committee on Villages and Small Towns, expert of Research Institute of Cultural and Natural Heritage. Since 2014, this institute is considered as basics for the World Heritage Protection on the territory of Commonwealth of Independent States (CIS).
  - The invited experts could visit and see the whole territory of Kizhi Island and of the WHS buffer zone, the comments were made regarding the project proposals for the Museum development.
- 7. One of the most acute issues discussed with the experts was the entrance area of Kizhi. They listened to different proposals for the entrance area, familiarized with the repair work already done. As a result, the experts suggested that the existing temporal buildings could be used as the basis for projecting the next stage of the prospective entrance area, because these buildings feature modern laconic architectural forms and their overall dimentions do not violate the surrounding landscape and do not mislead visitors.
- 8. The following plan for the entrance area was developed in collaboration with the experts:
  - analyze the Outstanding Universal Value of the WHS Kizhi Pogost so that the OUV criteria
    were described by the means of real existing attributes, features, properties and so on. This is
    needed for the WHS monitoring and assessment of impacts;
  - 2) The WHS MP should be supplemented with the results of the above-mentioned analysis. This is needed in order to have the opportunity to control different aspects of the integrity and authenticity of the WHS;
  - perform the calculations for projecting the entrance area (necessary functions, throughput capacity of the premises in the entrance area);
  - develop a conceptual design of the entrance area;
  - 5) perform the assessment of impacts (VIA) based on the analysis of the OUV (see 1);
  - 6) send the project to the WHC according to the regulations.

- The Museum plans the next stages in this sequence only. Thus, the conceptual design of the entrance area as well as the future of the temporal buildings constructed for the 300 anniversary in the entrance area depend fully on the decision of the WHC.
- On the 14 of July, 2014, the Publoic Council held a discussion of proposals for the entrance area and this sequence of activities was approved (the Protocol and decision are applied).

Kizhi Museum operates the WHS Kizhi Pogost and this is why really needs the ICOMOS assessment of this approach. We are asking you to confirm this approach or make necessary corrections.

#### ANNEX N

#### Application from the State Party regarding amendments to the Buffer Zone



#### КОМИССИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ ПО ДЕЛАМ ЮНЕСКО COMMISSION DE LA FÉDÉRATION DE RUSSIE POUR L'UNESCO COMMISSION OF THE RUSSIAN FEDERATION FOR UNESCO



Секретарият Комиссии: 119200, Москва, Г-200 Смоленская-Сенная площадь, дом 32/34, подъезд 1

Secrétariat de la Commission: 32/34 Smolenskaya-Sennaya pl., Entrèe 1 Moscou, 119200, G-200

Secretariat of the Commission 32/34 Smolenskaya-Sennaya Sq., Entrance 1 Moscow, 119200, G-200

тел./tel: +7 499 244 2456, фикс/fax: +7 499 244 2475, e-mail: rusnatcom@mail.ru

Moscow, " 4" February 2014

Dear Mr.Rao,

With the reference to our letter № 199/юн of 31 January 2014, please find attached the documents on the suggestions for slight change of the boundaries of the World Heritage Site "Kizhi Pogost" (C544), in particular the borders of the buffer zone, prepared in accordance with the annex to the Operational Guidelines for the Implementation of the World Heritage Convention.

Please accept, dear Mr.Rao, the assurances of my highest consideration.

Grigory Ordzhonikidze Secretary-General

MR. KISHOR RAO DIRECTOR WORLD YARITAGE CENTRE **UNESCO** 

**Paris** 

#### Application for Minor Boundary Modification of

#### the World Heritage Property

#### "Kizhi Pogost" (C544)

#### 1. The property area (in hectares):

#### a) The property area as inscribed:

- The WHP territory: 0,57 ha;
- The buffer zone territory: 14,350 ha at the moment of inscription in 1990;
- The buffer zone territory: 9,999 ha approved at the  $37^{\text{th}}$  session of the World Heritage Committee in 2013 (buffer zone 2013)

#### b) The property area as proposed to be modified:

- the WHS territory: 0,57 ha (no modification requested);
- the buffer zone territory: 14,940 ha.

#### 2. Description of the proposed modification:

#### a) The territory of the property

There are no boundary modifications proposed for the territory of the World Heritage Property "Kizhi Pogost".

#### b) The buffer zone of the property:

It is proposed to extend the boundaries of the WHS buffer zone to the size stated in the nomination dossier of the property plus two additional plots of Bolshoy Klimenetskiy Island (to the south and east from the former boundary, 590 ha), which entered the buffer zone 2013.

The proposed buffer zone of the WHS "Kizhi Pogost" is located in the Kizhi skerries of Lake Onega. It includes the whole island of Kizhi, the waters of Lake Onega adjacent to the island, the neighboring islands and a part of the mainland. The area is 14,940 ha. This territory is immediately adjacent to the site and intended to ensure its physical safety, the best possible visual perception and maintaining its valuable historical and natural environment.

The buffer zone covers the most picturesque central and northern parts of the Kizhi skerries, in-cluding a part of the shore of the Zaonezhie peninsula, the island of Bolshoy Klimentsky and many smaller islands (Volkostrov, Shunevsky, Eglov, Uimy and others). At present there are 48 historical villages on the territory of the museum buffer zone. People permanently reside only in 14 of them. Here there are the villages of Boyarshchina, Vasilievo, Vorob'i, eastern Garnitsy, Ezh Guba, Dudnikovo, Eglovo, Ersnevo, Zharnikovo, Zubovo, Klimentievskaya, Klinovo, Kuznetsy, Kurguenitsy, Lakhta, Seredka, Longasy, Malkovo, Migury, Nasonovshchina, Selga, western Garnitsy, Petry, Oyatevshchina, Posad, Potanevshchina, Pustoy Bereg, Rechka, Sennaya Guba, Pleshki, Sychi, Telyatnikovo, Slyamino, Shuino, Shchepino, Korba and Yamka. The space and planning structure has been most fully

preserved in the villages of Oyatevshchina, Sychi, Shuino, Posad (Volkostrov), Shlyamino, Nasonovshchina and Telyatnikovo.

#### 3. Justification for the modification

A scheme of the "museum protected area" boundaries was included in the nomination dossier at the moment of the property's inscription on the World Heritage List as its buffer zone (14,350 ha). It was an approximate scheme. The boundary was not clearly described and fixed by coordinates.

In 2012 the WHP buffer zone boundaries were clarified in the course of the retrospective inventory process and approved at the 37<sup>th</sup> session of the World Heritage Committee in 2013.

The buffer zone boundary clarification was made in accordance with the protected zones boundaries of the WHP "Kizhi Pogost" approved by the Order of the Ministry of Culture of the Russian Federation № 1268 dated from December 29, 2011.

The approved WHP protected zones (buffer zone 2013, 9, 999 ha) is intended, in the first place, to ensure the safety of the central site (the Kizhi Architectural Ensemble) but, as it has turned out, it doesn't fully guarantee the landscape conservation within the property visibility distance.

This is proved by the last year experience, when deforestation attempts were made in areas located outside the WHP protected zones but within the initial buffer zone boundaries. It could have a negative impact on the perception integrity of the WHP historical landscape.

Thus, the practice confirms that reduction of the initial buffer zone boundary is undesirable since it entails risks for the WHP "Kizhi Pogost".

In 2013 the museum work was specially focused on studying and implementing the UNESCO and international legislation requirements on the WHP conservation. The WHP management that provides the sustainable development of the territory became a priority. The museum professionals closely interacted with foreign experts on cultural heritage. The Workshop on World Heritage Management was held and the WHP Management Plan was revised.

The Kizhi Museum experts prepared an updated buffer zone map in accordance with the World Heritage Center requirements. The boundaries of the proposed buffer zone fully coincide with the boundaries stated in the property's nomination dossier plus two additional plots of Bolshoy Klimenetskiy Island (to the south and east from the former boundary, 590 ha), which entered the buffer zone 2013. The proposed buffer zone (14,940 ha) will reduce risks in relation to the site.

#### 4. Contribution to the maintenance of the Outstanding Universal Value (OUV):

The important component of the WHP OUV is its historical setting. The buffer zone territory has a distinct historical and ethno-cultural character. Several powerful cultural layers of ancient, medieval and modern times have been highly preserved on the territory.

The proposed modification of the WHP buffer zone boundary (return to the boundaries set in the property's nomination dossier) will improve the protection of the site and ensure the historical and cultural landscape conservation of the surrounding area using both state regulation and legislation mechanisms and international requirements on world cultural heritage conservation.

#### 5. Implications for the property legal protection:

Land use modes and town-planning regulations are established within the buffer (protected) zone. Regulation of town-planning and economic activity within these boundaries is an essential condition for the WHP "Kizhi Pogost" Outstanding Universal Value protection. Town-planning and economic activity should be carried out considering the fact that this territory is located in the zone of the historical, cultural, visual and emotional impact of the unique architectural complex.

A land management file is executed for each component of the protected zone of the WHP. Information about the protected zones boundaries (with account of restrictions and encumbrances) is included in the State Real Estate Cadastre.

However, in recent years, attempts of old-growth forests deforestation have been made within the WHP visibility distance. These plots are located outside the protected zones (which means that they are outside the buffer zone that was approved in 2013). At present, the museum has managed to suspend the process but returning the WHP buffer zone status to these forest plots will provide greater protection.

The museum has sent a request for registration of land plots in permanent (perpetual) use for the recreational activity in order to conserve the old-growth forests within the WHP visibility distance and to ensure the integrity of the WHP buffer zone territory.

#### 6. Implications for management arrangements:

Clarification of the WHP buffer zone boundaries corresponds to the formulated priorities and the property management system. In 2013 the WHP "Kizhi Pogost" Management Plan was fully revised. The Management Plan, its legal protection measures and the Action Plan are based on the buffer zone boundaries set in the property's nomination dossier as they better protect the property and historical and natural landscape integrity.

The landscape approach is used in the WHP Kizhi Pogost management planning. Based on the landscape exceptional value, the Management Plan defines the desired state of the landscape as well as the main criteria for its conservation and landscape management principles. The WHP setting and its surrounding territory are to be developed according to the basic principle of revitalization of the Kizhi architectural ensemble's historical environment.

#### 7. Appendices:

- 1. Map of the WHS "Kizhi Pogost" territory at the moment of inscription
- 2. Map of the WHS "Kizhi Pogost" territory approved at the 37<sup>th</sup> session of the World Heritage Committee (WHC-13/37.COM/20)

#### (for the above no boundary modification is requested)

- 3. Map of the WHS "Kizhi Pogost" buffer zone at the moment of inscription
- 4. Map of the WHS "Kizhi Pogost" buffer zone approved at the 37<sup>th</sup> session of the World Heritage Comittee (WHC-13/37.COM/20), the current one, buffer zone 2013
- 5. Map of the WHS "Kizhi Pogost" buffer zone indicating the current and requested boundaries
  - Map of the WHS "Kizhi Pogost" buffer zone proposed for approval.

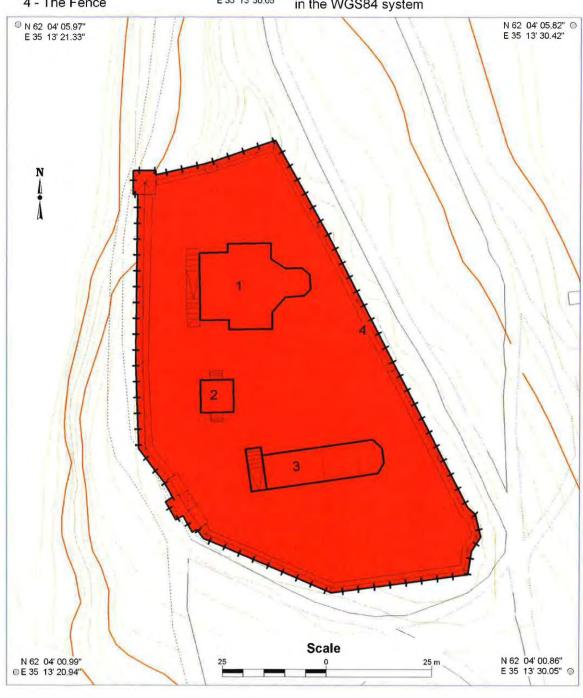
### **Territory** of the World Heritage Property "Kizhi Pogost" (C544)

#### **Explication:**

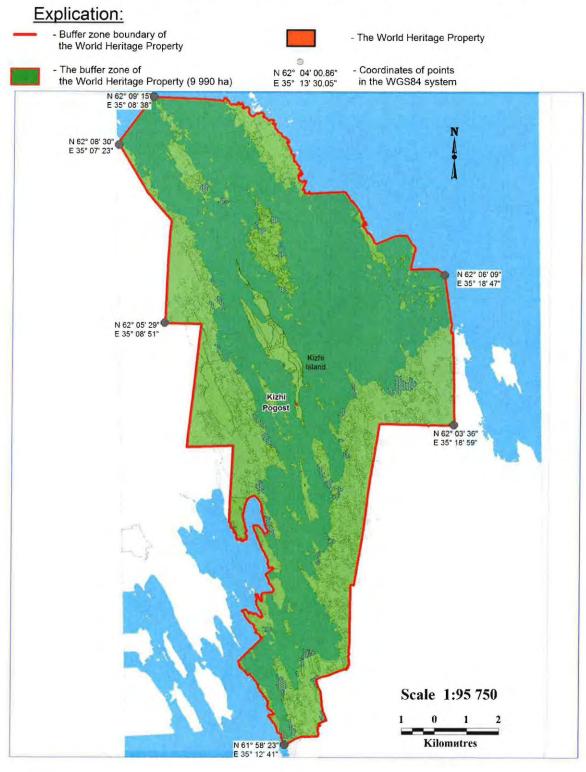
- 1 The Church of the Transfiguration
- 2 The Bell tower
- 3 The Church of the Intercession
- 4 The Fence

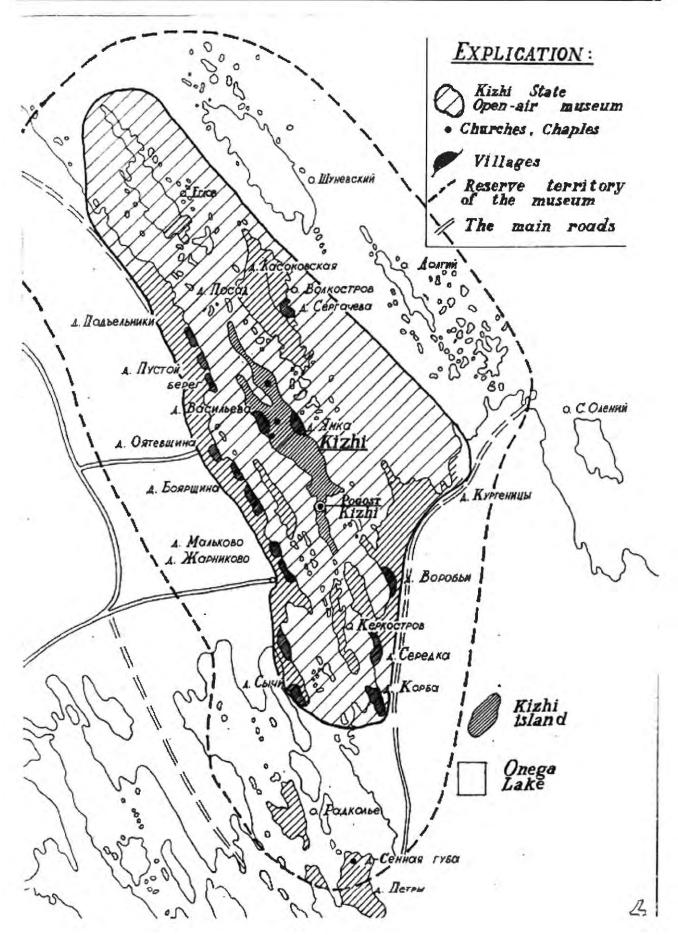


- The territory of the Kizhi Pogost (0,57 ha)
- Boundary of the World Heritage Property
- N 62 04' 00.86" E 35 13' 30.05"
  - Coordinates of points in the WGS84 system



# The buffer zone of the World Hertitage Property "Kizhi Pogost" (C544), approved at the 37-th session of the World Heritage Committee ( (WHS-13/37.COM/20)



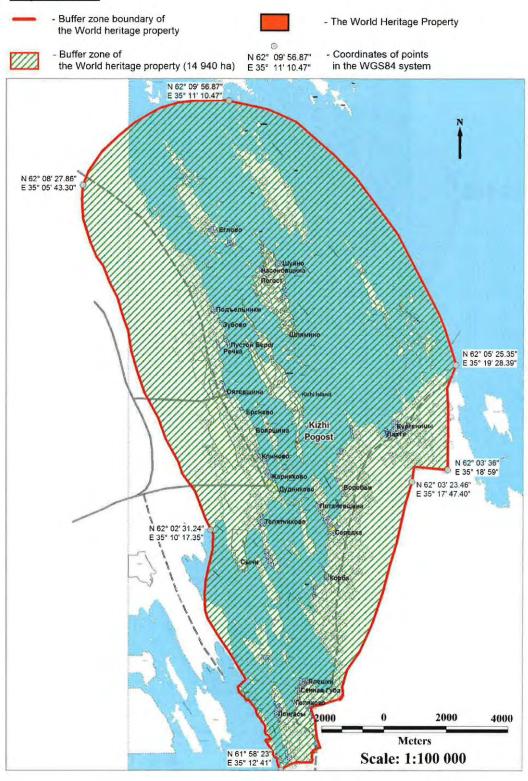


# Buffer zone of the World Heritage Property "Kizhi Pogost" (C544)

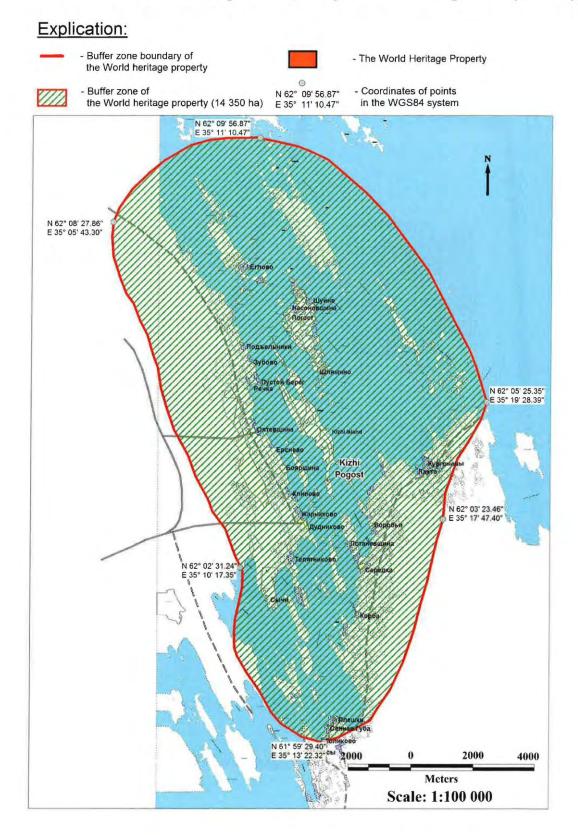
# **Explication:** Buffer zone boundary of the World heritage property - The World Heritage Property - Requested buffer zone boundary of - Coordinates of points in the WGS84 system N 62° 09' 56.87" E 35° 11' 10.47" the World heritage property Requested buffer zone of the World heritage property (14 940 ha) N 62° 09' 56.87" E 35° 11' 10.47" N 62° 08' 27.86" E 35° 05' 43.30" N 62° 05′ 25.35″ E 35° 19′ 28.39″ N 62° 03′ 36″ E 35° 18′ 59″ N 62° 03' 23.46" E 35° 17' 47.40" N 62° 02' 31.24" E 35° 10' 17.35" 2000 4000 Meters Scale: 1:100 000

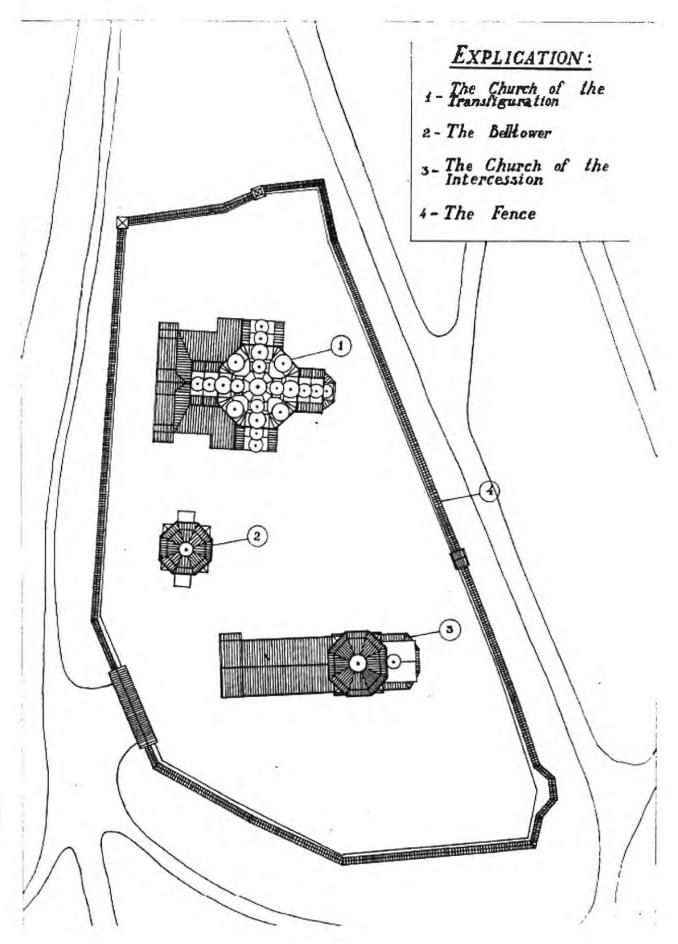
# Buffer zone of the World Heritage Property "Kizhi Pogost" (C544)

#### **Explication:**



# Buffer zone of the World Heritage Property "Kizhi Pogost" (C544)





#### **ANNEX O**

#### Information reference on the issue of adoption of the Buffer zone

### INFORMATION REFERENCE ON THE ISSUE OF ADOPTION OF THE BUFFER ZONE OF THE WHS KIZHI POGOST

The situation with the buffer zone boundaries of the WHS Kizhi Pogost became tangled by the beginning of 2014.

The background is the following:

- 1. <u>In 2012</u>, the Kizhi Museum sent to the WHC a request to change the buffer zone boundaries so that they matched exactly! with the boundaries of the protected zones approved by the Ministry of Culture of the Russian Federation in 2011. That was really a logical step, because the boundaries of the buffer zone set in 1990 (the WHS nomination year) were abstract, and equating these abstract boundaries with the officially approved boundaries of the protected zone made the buffer zone management and protection much simpler according to the RF legislation.
- 2. <u>In September, 2013</u>, the Kizhi Museum contracted Mrs. Katri Lisitzin, an ICOMOS expert, to provide consultations on the issues of the WHS Kizhi Pogost management. The expert consultant informed the Museum that the request was not approved and cannot be approved ever. We were recommended to apply for the buffer zone boundary announced in 1990 by the WHS nomination, and to do it according to the UNESCO requirements for the cartography. These recommendations were fulfilled, the maps were made and sent to the WHC in November, 2013 (via the Ministry of Culture and the Ministry of Foreign Affairs of the Russian Federation).
- The same buffer zone boundaries maps were mentioned in the WHS Management Plan. The Management Plan was completed, translated into English, composed and sent to the WHC as well.
- 4. In the middle of January, 2014, suddenly it turned out that the request to change the buffer zone boundaries sent to the WHC in 2012 was approved on the 37<sup>th</sup> session of the WHC (in June, 2013). By the same time, the WHS Management Plan with buffer zone boundaries of 1990 and maps had been already developed, sent to the WHC and distributed. These maps were used during different meetings and presentations related to the WHS protection. The Museum had to substantiate the buffer zone boundaries of 1990. The situation became already tangled.
- 5. However, in the beginning of February, 2014, the situation grew even worse because the following recommendation was received: to prepare and send as soon as possible the application for the modification of the WHS buffer zone boundaries made in line with the retrospective inventory, i.e. this time it must unite the configurations of the both previous variants. The Museum had to fulfill this recommendation as we didn't have any other option left.
- 6. As a result, we have 3 different maps of the buffer zone boundaries. More than that, the State Party was given a recommendation on the 38<sup>th</sup> session of the WHC to change the boundaries of the protected zone of the WHS Kizhi Pogost approved by the Ministry of Culture of RF in 2011 and to modify them so that they were conformed to that particular map of the buffer zone that we have now due to the above mentioned circumstances.
- 7. It is very difficult to change the protected zone of the Site, almost impossible! This is a much time and money consuming procedure that needs lots of agreements to be made.

The Kizhi Museum cannot communicate directly with the WHC. The information flow runs both ways through a number of respective authorities. It is necessary to mention that in 2012-2013 there were some changes in this communication link with the WHC. Due to these circumstances, we cannot figure out where exactly and why the communication fault occurred: it turned out that nobody was aware of the adoption of the boundaries, and namely neither the Ministry of Culture of RF, nor the Ministry of Foreign Affairs of RF, nor the WHC consultant, nor the ICOMOS expert who consults the Museum on the issues of the WHS management including buffer zones.

In this particular situation, if the Museum was not misinformed in autumn, 2013, that the request of 2012 has not been approved and never ever would be approved, and, about the necessity to apply the map of the WHS nomination in 1990 for the buffer zone, in this case there would not have been all subsequent documentation issued and applied.

However, the Kizhi Museum experts understand that it is strongly needed to protect some areas that adjoin the existing protected (buffer) zone. Moreover, the Museum had to protect these areas from the attempts of illegal timber felling. These attempts were ceased! These forest resources adjoining the protected (buffer) zone boundaries can be protected by other means as well i.e. without changing protected and buffer zone boundaries. The Museum completes the formalities for the permanent gratuitous use of these land lots to have extra control and to protect them from illegal timber felling.

We are asking to consider the possibility to confirm the buffer zone boundary of the WHS Kizhi Pogost approved on the 37<sup>th</sup> session of WHC in 2013 as well as to recommend the Museum to study and to develop additional measures of protection for the areas adjoining the boundaries of the buffer zone and to reflect these measures in the WHS Management Plan.

#### **ANNEX P**

#### **Statement by the Supervisory Committee**

Заключение по результатам работы Рабочей группы при Министерстве культуры Российской Федерации по вопросам реставрации объекта всемирного наследи Преображенской церкви Кижского ансамбля

02-04 июля 2014 г.

о.Кижи, Республика Карелия

Рабочая группа при Министерстве культуры РФ в составе членов секции деревянного зодчества и музеев деревянной архитектуры Научно методического совета МК РФ Вахрамеевой Т.И., Орфинского В.П., Попова А.В., Попова В.А., Титова В.А. 02-04 июля 2014 г. совместно с представителями консультационной миссии ИКОМОС ознакомилась с работами по сохранению объекта всемирного наследия – Преображенской церкви Кижского ансамбля, с выездом на остров Кижи.

В ходе работы члены Рабочей группы посетили реставрируемый объект, приняли участие в организованном музеем-заповедником «Кижи»» совместном совещании с миссией ИКОМОС.

По результатам непосредственного осмотра памятника, ознакомления с работами по объекту на производственном комплексе музея-заповедника, а также с представленной автором проекта Рахмановым В.С. проектной документацией, с докладами участвовавших в совещании специалистов члены комиссии составили настоящее заключение.

- 1. Работы по сохранению объекта всемирного наследия проводятся в соответствии с имеющимися Программами, на основании согласованной и утвержденной проектной документации и рекомендаций ИКОМОС и Рабочей группы.
- 2. Работы по реставрации проводят производственные организации ООО «Заонежье», действующая на основании Договора с музеем-заповедником «Кижи», и «Плотницкий центр» музея-заповедника. Следует отметить проявленные сотрудниками этих организаций последовательность и преемственность в проведении работ, их хорошее качество, соблюдение рекомендаций предыдущих миссий ИКОМОС и Рабочей группы при Министерстве культуры РФ
- 3. В процессе ведения работ автором проекта Рахмановым В.С. совместно с сотрудниками производственных организаций проводится постоянное дообследование памятника, уточнение его конструктивных и технологических особенностей. На основании полученных новых данных вносятся обоснованные дополнения в рабочую документацию, реализуемые на практике.
- 4. В ходе реставрационных работ на объекте выявлен ряд проблем, требующих по мнению членов Рабочей группы, первоочередных решений. К ним относится вопрос стабилизации состояния сруба нижнего восьмерика.
- Сруб, восстанавливаемый на своем месте после проведения ремонтно-консервационных мероприятий в производственном цехе, стремится вернуться в деформируемое состояние, приобретенное за время его существования. Для предотвращения и уменьшения остаточных деформаций реставраторы в ходе сборки сруба используют временные стяжки из металлических стержней на талрепах, закрепляемых к металло-каркасу. Отмечаемые процессы в поведении восстанавливаемого сруба подтверждают необходимость проведения мероприятий по его дополнительному укреплению на долговременной основе. При этом представляется допустимым ограниченное использование современных технологий и материалов. По рассмотренным вариантам укрепления, представленным проектировщиками, резюмируем, что использование вертикальных деревянных нагелей между бревнами, которых изначально в срубе не было, невозможно, а установка пристенных стоек-сжимов не даст необходимых результатов. Предлагаемые к введению между бревнами под наклоном к вертикали металлические шурупы, позволяют стабилизировать ситуацию. На практике они уже были использованы на ряде деревянных объектов Германии. Их применение на памятнике представляется допустимым при условии обратимости данных мероприятий, использовании в минимальном количестве, и только на наиболее критических участках сруба. При этом их установка может быть осуществлена после полного восстановления сруба нижнего

восьмерика и проведения мониторинга его состояния, подтверждающего их необходимость и наиболее рациональное расположение.

- Другими проблемами являются укрепление переходного ко второму восьмерику четверикового сруба, рациональное распределение нагрузки от верхних ярусов на конструкции нижнего.
- 5. На основании выше изложенного члены комиссии рекомендуют:
- В первоочередном порядке дополнить разделы рабочей документации по объекту материалами, включающими мероприятия по укреплению сруба нижнего восьмерика, переходного четверика, конструкций, воспринимающих нагрузки от верхних ярусов и передающих их на нижний ярус. Одним из решений, способствующих устранению проблем, может быть устройство наружной обшивки, одновременно и как способа защиты древесины стен памятника, бревна которых имеют глубокие трещины, реставрационные коронки-накладки, протезы-вставки. Привлечь к рассмотрению дополнительных разработок членов Рабочей группы.
- По результатам вновь выявленных при исследовании разбираемых конструкций данных уточнить рабочую документацию по конструкции покрытия бочек над прирубами (лемеховое или дощатое покрытие).
- Продолжить комплексный мониторинг состояния памятника в процессе его реставрации.
- 6. Для гарантированной сохранности памятника и скорейшего завершения его реставрации работы на памятнике не должны прерываться , при их стабильном финансировании, и их проведение должно осуществляться сложившимся на сегодня коллективом проектных и производственных организаций, глубоко изучивших объект и его проблемы.
- 7. Одновременно члены Рабочей группы отмечают высокое качество и профессионализм в проведении соответствующими отделами музея-заповедника работами по эксплуатационному уходу, профилактическим мероприятиям и мониторингу состояния памятников музея-заповедника «Кижи». Опыт проведения данных работ следует рекомендовать к использованию другими музеями деревянного зодчества России.

Подписи:

Вахрамеева Т.И. Орфинский В.П. Попов А.В. Попов В.А. Титов В.А.

### **ANNEX Q**

### Photographs





Building of a new pier by the church pogost.





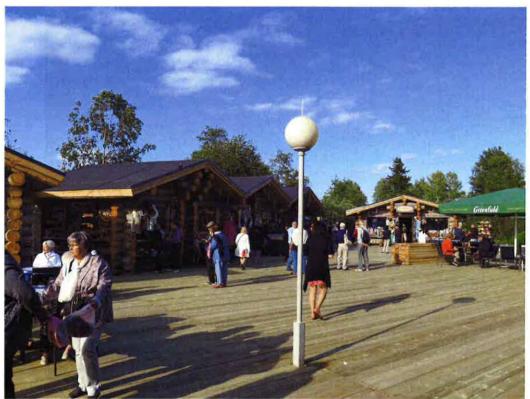
The entrance zone, December 2011.





The entrance zone, July 2014.





Dwelling house by the Gogolevskiy guest house. December 2011.



The same house in july 2014.

