Kujataa Greenland: Norse and Inuit Farming at the Edge of the Ice Cap (Denmark) No 1536

Official name as proposed by the State Party
Kujataa Greenland: Norse and Inuit Farming at the Edge of the Ice Cap

Location
Greenland, Municipality of Kujalleq
Denmark

Brief description
Kujataa is a sub-arctic farming landscape located in the southern region of Greenland. The nominated property consists of five components, which together represent the demographic and administrative core of two farming and hunting cultures: a Norse Greenlandic culture from the late 10th to mid-15th centuries, and a European-Inuit culture from the 1780s to the present. Despite their differences, these two cultures and the specific environmental and climatic conditions of this part of Greenland have created a cultural landscape based on farming, grazing and marine mammal hunting in a marginal environment for farming. The landscape represents the earliest introduction of farming to the Arctic, and the Norse expansion of settlement beyond Europe.

Category of property
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 5 sites.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (July 2015) paragraph 47, it is a cultural landscape.

1 Basic data

Included in the Tentative List
29 January 2003

International Assistance from the World Heritage Fund for preparing the Nomination
None

Date received by the World Heritage Centre
27 January 2016

Background
This is a new nomination.

At the request of the State Party, ICOMOS participated in upstream consultations on 11 May 2015. Based on review of drafted text for sections 1 and 3, ICOMOS provided comments on the justification for Outstanding Universal Value and the overall robustness of the proposal.

Consultations
ICOMOS consulted its International Scientific Committees on Archaeological Heritage Management, on Cultural Landscapes, and several independent experts.

Comments about the evaluation of this property were received from IUCN in November 2016. ICOMOS carefully examined this information to arrive at its final decision and recommendations; IUCN also reviewed the presentation of its comments included in this ICOMOS report. IUCN’s will include the full comments as provided to ICOMOS in its evaluation book 41COM.INF.8B2.

Technical Evaluation Mission
An ICOMOS technical evaluation mission visited the property from 12 to 18 September 2016.

Additional information received by ICOMOS
A letter was sent to the State Party on 17 October 2016 requesting further information about the environmental and climatic conditions that support subarctic farming; the strategy used to select the components and how each component specifically contributes to the proposed Outstanding Universal Value; the operations of the ‘Steering Group’ and its relation to the ‘Management Group’; update on mining, energy and infrastructure developments; planning for tourism and interpretation; and the status of the Executive Order on Cultural Heritage Protection.

An Interim Report was provided to the State Party in January 2017 summarising the issues identified by the ICOMOS World Heritage Panel. Further information was requested in the Interim Report, including: concise text and maps that show the sequencing of human uses of the larger landscape of southern Greenland (including the locations of all Norse farming sites, marine mammal hunting and fishing sites and Thule Inuit occupation sites); the specific and necessary contribution of each of the five components of the serial property to the proposed Outstanding Universal Value; clarification of the attributes of the Inuit farming phase; further development of the comparative analysis to add known Viking sites in other countries; more detail on the potential impacts of future mining development; the possibility of establishing buffer zones for some or all of the components; and availability of needed expertise and financial resources of tourism planning. ICOMOS also queried whether the name of the property should be revised in order to more clearly communicate the two cultural/historical periods of farming.

Additional information was received from the State Party on 14 November 2016 and 22 February 2017 and has been incorporated into the relevant sections of this evaluation report.
Date of ICOMOS approval of this report
10 March 2017

2 The property

Description of the Serial Nomination
Kujataa is the modern Greenlandic name for the area known to the Norse as Eystríbyggð, in the south west of Greenland. The wider landscape is characterised by the ice cap, high mountains, wilderness and deep fjords that shelter the Kujataa lowlands that have a local climate that makes farming possible.

The State Party has nominated this serial property as an ‘organically evolved’ cultural landscape, with both relict and continuing dimensions. The nominated property consists of five components concentrated around the central part of the Norse Greenlandic settlement of Eystríbyggð. The five components have been selected in order to represent the full suite of attributes associated with the Norse Greenlandic culture, including monumental architecture with historic buildings, farm structures and dwellings, particularly at Qassiarusuk and Igaliku. These same areas have also been the focus of the later and continuing phase of Inuit farming.

1. Qassiarusuk (113.42 km²)
This component is the centre of the area’s population and is characterised by higher population densities and intensive land uses due to its relatively favourable conditions for farming. It has been thoroughly surveyed and contains 38 registered Norse Greenlandic archaeological sites, including 24 farm sites and the remains of Brattahlið, the settlement of Eiríkr rauði (Erik the Red) and his wife Tjodhildr (barns, church, dwellings, and irrigation). Structures associated with the revival of sheep farming in the early 20th century and current farming operations, fields and grazing areas are found in this component, including three listed buildings that date from the 1920s and 1930s. There are 11 sheep farms within the boundary of the component, and the house of the first modern sheep farmer in Greenland, Otto Fredericksen. There are Thule Inuit sites in this component, and the only known Palaeo-Eskimo site in the nominated property. Because it is across the fjord from the airport at Narsarsuaq, Qassiarusuk has a higher number of visitors than other components.

The additional information received from the State Party explains that this component is included because it contains the largest and most fertile agricultural land in Greenland. A complex irrigation system is found at Gardar, the cathedral, manor-centred settlement pattern and important seat of the Norse bishop of Greenland (Christendom’s westernmost episcopal see in the Middle Ages). Igaliku is also the first site of historical Inuit farming, and contains important Inuit stone houses.

2. Igaliku (82.87 km²)
Igaliku is a small sheep farming settlement, with numerous summer houses. There are 5 sheep farms within this component. Norse Greenlandic remains of the religious, domestic and agricultural infrastructure associated with the diocese of Greenland from the 12th-14th centuries are found in this component (17 sites). The episcopal manor (Gardar) was the largest settlement of Norse Greenland, and sites include remains of the cathedral, a large byre (said to have sheltered close to 150 head of cattle) and dwellings. The fields are amongst the most expansive and actively farmed, and provide a clear illustration of the farmland created on the fertile soils of the fjord. Modern farming was introduced in the late 17th century in this component. The settlement includes dwellings from the 19th century to today (53 listed buildings), showing the evolution of styles and materials over time, including the use of the prized Igaliku red sandstone. There are four registered Inuit archaeological sites in this component. Burial grounds have been documented, including Thule burials, modern Christian burials and early 19th century burials that suggest a transition between traditional Inuit and Christian traditions. There are some facilities for tourists at Igaliku.

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3. Sissarluttoq (3.39 km²)
The name of this component means ‘poor landing site’ and it is perched within a steep landscape setting, with good conditions for growing hay. This is the smallest of the five components and it features a single Greenlandic Norse farmstead that is particularly large and well preserved. It consists of over 40 domestic and farm structures (dwellings, animal pens, byres and stores), set within a relatively isolated plain on a high plateau, surrounded by grazing areas. A number of Norse dry stone ruin structures are present, demonstrating this specific building technique. There are no Inuit sites or Inuit farming attributes in this component, and no post-medieval elements other than some fences and two huts built in the 1970s. Access to this component is not easy due to its location.

The additional information received from the State Party explains that this component is included because it is the single most well-preserved Norse farm in Greenland. It is considered by the State Party to be unique, and features uncultivated meadows and summer pastures.

4. Tasikuluulik (Vatnahverfi) (75.42 km²)
This large component is located along the southern coast of the fjord. Its Norse place name Vatnahverfi
means ‘lake district’, and includes the small plain of Igaliku Kujalleq (Hôfôa), which has a major Norse Greenlandic church farm. Several large glaciers, ice and Katabatic winds are found further inland from this component, creating a very dynamic landscape formed by the build up of deposited sediment known as the Sandur of Tasikuluulik (which might contain archaeological sites under the shifting dunes). Further west is an area with many lakes and dense scrub woodland which features a number of small- to medium-sized farm sites. Andreas Egede from Igaliku was the first to settle in Igaliku Kujalleq in 1934, but farms were not established in the internal part of Tasikuluulik until the 1980s. This is the best researched component in terms of archaeological documentation and excavation, which commenced in the 19th century. There are no Thule Inuit sites, 19 Norse archaeological sites, 6 farms, and one listed historic building (1946) within the boundary of the component.

The additional information received from the State Party explains that this component is included because it is the location of Greenland's longest rural road connecting sheep farms, and its inland/lakeside settlement and small/medium sheep and goat grazing farms. The name Vatnahverfi is the only local name to survive from medieval times. It demonstrates use of woodland resources and winter pastures.

5. Qaortukulooq (Hvalsey)
This component is located in the transition zone between the inner and outer fjords and contains 11 Norse sites, and 2 Thule Inuit sites. This area contains good grazing land, but is less productive for hay making, and farm sizes tend to be smaller than in the other components. Hvalsey ('whale island') is located in this component and is the most iconic Greenlandic Norse site within the nominated property. It includes a large dry stone church, the best-preserved Norse ruin in Greenland, and a number of other structures (16 registered structures occur within the site of Hvalsey). Researchers speculate that the surrounding farms supported the important status of Hvalsey. There is no modern settlement at Hvalsey, although there is sheep grazing. There is a jetty, which allows easy access to the site by boat.

Also located within this component is Upernaviarsuk, the location of a current Greenland government research and training centre for farming. This location is important in the history of the revival of farming in the 18th century. The first farming activities since the Norse occurred here in 1780, by Anders Olsen and his Inuit wife Tuperna, before moving to Igaliku. The foundations of their dwellings are legible and provide evidence of the cultural adaptations to the environment, and to farming by the European colonists and Inuit people. There are also a number of Thule burials, evidence of 20th century farming, and fields for growing crops and grazing.

The additional information received from the State Party explains that this component is included because it completes the property’s set of Norse and Inuit settlement layouts and farming practices. It provides evidence of horizontal transhumance. Hvalsey is Greenland’s single largest and best preserved Norse ruin, and was the site of a church wedding in 1408, the last known sign of the Norse in Greenland.

History and development
The State Party has explained that the cultural history of Greenland is characterised by a series of in-migrations of different cultures interspersed by long periods when there were no people in parts of, or even the entire of Greenland. In general, Greenland’s cultural landscape is comprised of several key phases of cultural history starting with the Palaeo-Eskimo hunter-gatherer peoples of North American origins (the Arctic Small Tool Tradition of the Saqqaq and Independence I-II; and Greenlandic Dorset cultures) from 2400 BC. Norse settlers arrived in southern Greenland from 1000 AD; and the Thule Inuit period can possibly be traced from at least the 13th century; and modern farming of the landscape was introduced from the late 18th century by European/Inuit peoples.

Understanding the cultural histories for Greenland is essential for appreciating the distinctiveness of the land uses of Kujataa. There are seven sites that provide evidence of Palaeo-Eskimo occupation of the nominated property from the 3rd millennium BC. These sites share similarities with those elsewhere in Greenland and in Canada.

From the 10th century AD, Norse colonists from Iceland led by Eiríkr rauði (Erik the Red) settled in this area for a period of approximately 500 years. The Norse settled in two main parts of Greenland. The larger Eastern settlement (Eystribyggð) is the focus of Kujataa; and the Western settlement (Vestribyggð) was located further north, along Greenland’s west coast. From the 13th century, Norse Greenlandic settlements had their own bishop, ecclesiastical and secular administrations, and trade networks. This was the extreme edge of Norse settlement, yet their disappearance from Greenland in the 15th century has not yet been well explained.

Thule Inuit peoples have lived in Greenland from at least the 13th or 14th century onwards, and in Kujataa from at least the 15th century (although the State Party has advised that there has been little scientific dating applied to Thule archaeological sites). This is an under-researched aspect of the area’s history. It is possible that there was a substantial period of co-existence of Norse and Thule Inuit peoples in Greenland (up to 250 years, according to the State Party). This raises interesting, but currently unanswered questions about their interactions and influences, and the potential continuities between the two separate periods of farming at Kujataa. There are different phases of Thule Inuit occupation proposed by the State Party, responding to different climatic conditions and resources over time. In general, the Thule Inuit sites demonstrate a high degree of mobility and seasonal movements, with a very high dependence on marine resources, especially seals. From the 16th century, trading
with European explorers, traders and missionaries also became an important component of Thule Inuit life. In the 18th century epidemics of European diseases such as small pox also affected Thule Inuit settlement patterns. The Greenland Inuit of today trace their ancestry directly from the Thule Inuit, along with Scandinavian and European elements and traits.

The period of Inuit farming covers the time period from the late 10th century to mid-15th century; and Norse Greenlandic culture which occupied this area late 18th century to the present. The nominated cultural landscape represents two periods of settlement and subsistence based on a combination of farming, grazing and hunting of marine mammals (particularly seals): the Norse Greenlandic culture which occupied this area between the late 10th century and mid-15th century; and the Inuit culture which has farmed in this area from the 1780s to the present. While these cultures are distinct, and a period of several centuries separates them, the State Party argues that they share their reliance on animal husbandry, farming and marine mammal hunting within a marginal environment. For this reason, the State Party asserts common land-use patterns across these periods of time, giving the landscape its distinctive character. The State Party explains that the farming landscape bears witness to both cultures and to the continuities that have allowed modern farming to develop from a ‘medieval mould’. Both cultures depended on their knowledge of the climate, and on their ability to utilise the extensive marine resources.

The State Party has identified the tangible and intangible attributes of each period of cultural history, and also shared attributes that include the landscape setting, home fields and meadows, flora and pastureland, domestic livestock, dependency on marine and other wild natural resources, and landscape settlement patterns.

The Norse Greenlandic population possibly reached 2,000-3,000 people at its peak. Its settlements were substantial, and included a well-established ecclesiastical and secular administration centred on the selected components of Kujataa. The settlements relied on a unique mix of animal husbandry. Like other Norse cultures, cattle were a focus of subsistence, but there were also sheep, goats, horses and pigs, all augmented significantly by seal hunting and long-range walrus and polar bear hunts. The Norse traded tusks and hides, live polar bears and possibly gyrfalcons. The reasons for the end of the Norse Greenlandic settlement are unclear, and are the subject of debate. Norse Greenlandic history and cultural traditions are richly recorded in the Icelandic sagas.

Danish-Norwegian trading posts, and Moravian missions were established in western Greenland from 1721 and encouraged gardening of vegetables. The first trading post in Kujataa was established at Qaqortoq in 1775. After a gap of 300 years, farming was introduced again in 1783, by an Inuit woman, Tuperna and her Norwegian husband, Anders Olsen with a few cattle and goats. Their farm was at the location of the former Norse Greenlandic bishop’s residence at Igaliku (after an earlier effort at Qassiarusk in 1781); and a community became established which combined farming/gardening, grazing of sheep, goats and cattle, and traditional Inuit hunting of marine mammals. Specialised sheep farming was introduced to Kujataa in the early 20th century at Qassiarusk. With the increased successes of sheep grazing, cattle and goat numbers declined in the 20th century, and there were no cattle in Greenland at all between 1975-1998. Small numbers of cattle have been re-introduced since that time in order to establish a local supply of fresh milk (although some beef herds have been reintroduced in the past decade). In 2014, the total head of cattle within the nominated property was 45.

Today, most of the 50 farming families in Kujataa trace their ancestry to Tuperna and Anders Olsen and identify as Inuit. The State Party estimates that the nominated property contains 61% of all sheep in Greenland, 31% of all cattle, and 77% of all horses. The modern sheep farms produce about 75% of the mutton consumed in Greenland and contribute to the efforts to improve food security.

The environmental factors that support agriculture are specific to this area and are crucial to understanding the historical patterns and phases of the landscape. These include the location in the fjord, availability of fertile soil and the climate (which has varied through time). There is a contrast between the cultivated and uncultivated lands that underlines the specific balance of these factors.

As noted previously, the hunting of marine mammals and fishing were essential to both phases of farming cultures, especially the abundant populations of seals hunted on the summer drift ice from the outer fjords.

The State Party explains that on one side were Norse farmers that over time became hunters and sealers; and on the other were Thule Inuit hunters that over time became farmers. According to the State Party, while the seasonal hunting took place throughout the wider coastal areas and fjords, the resources were brought back to the farms. There are therefore scarce tangible attributes that directly relate to this key subsistence activity. The farms were – and still are – the focal locations for the distinctive lifeways of the two farming cultures in this area.

3 Justification for inscription, integrity and authenticity

Comparative analysis
The Comparative Analysis is presented in two parts: the internal comparison with sites within Greenland; and external comparison including World Heritage and Tentative Lists properties and other areas throughout the world with comparable attributes and/or cultural histories.

The additional information received from the State Party reports that there are more than 550 sites associated with the Norse Eastern Settlement, and that these are found throughout southern Greenland. The internal
comparison compares the nominated components of Kujataa with other areas according to the range and preservation of Norse Greenlandic site types (such as churches, large estates, monumental architecture, feasting halls and farms); the Norse Greenlandic settlement densities; landscape types (coastal plains/strips, inland valleys, inner and outer fjords); the state of preservation and visibility of Norse Greenlandic archaeological sites; the existence of historical sources; the number of modern farms; and the number of listed historic buildings. The five components are compared with other Kujataa areas, as well as Vestribyggð, which is another main settlement area of the Norse Greenlanders in Greenland.

The State Party finds that the nominated property represents the full range of attributes associated with farming cultures in Kujataa within a coherent landscape/area that formed a centre of Norse Greenland, and subsequently the core area for modern farming. The selected components contain a strong representation of Norse Greenlandic archaeological sites, and a superior capacity to demonstrate central sites, large estates with churches and other monumental architecture. For example, the churches at Hvalsø and Gardar are the most monumental and well-known Norse Greenlandic ruins; and there are several exceptional examples of feasting halls.

Because of the specific ecological characteristics of Kujataa, this area is also the richest in relation to the modern period of farming in Greenland. This is demonstrated by the additional information provided by the State Party containing maps that show all Inuit sheep farm locations from 1906, and current farm localities.

The external comparison looks at properties on the World Heritage List and on the Tentative Lists according to several dimensions, including: farming landscapes in the subarctic, sea mammal hunting traditions, farming landscapes in marginal environments and modern farming at high latitudes. Accordingly, the State Party compares the nominated property with World Heritage properties: L’Anse aux Meadows National Historic Site in Canada (1978, criterion (vi)); the Agricultural Landscape of Southern Oland in Sweden (2000, criteria (iv) and (vi)); Vegaøyan – the Vega Archipelago in Norway (2004, criterion (vi)); and St Kilda, in the United Kingdom (a mixed property inscribed for cultural criteria (iii) and (vi) in 2005). Outside the World Heritage List, a number of areas were included in the comparative analysis, including: Norway’s Lofoten Islands (Tentative List); the Minusinsk Basin in southern Siberia; Okhotsk culture; and the South Island of New Zealand. In the additional information provided by the State Party, further comparisons are also made with the Danish Tentative List property Aasivissuit-Nipisat, Inuit Hunting Ground between Ice and Sea (nominated in 2017); the transnational Tentative List property of Viking Monuments and Sites (Denmark, Germany, Latvia, Norway); and the Canadian Tentative List property of Quttinirpaaq. While all of the compared examples have points of similarity to Kujataa and are associated with either Inuit or Norse cultural histories, the State Party demonstrates that the coincidence of both in the context of sub-Arctic farming is distinct; and that none of the compared examples have the same combination of land uses and cultural histories.

ICOMOS considers that the revised comparative analysis justifies consideration of this property for the World Heritage List and has identified both the specificities of the nominated property and the distinctions that can be drawn with other areas. ICOMOS also considers that the comparative analysis has offered a rationale for the selection of the five components, and that continuing work on a sequenced understanding of all phases of human history in southern Greenland is desirable.

Justification of Outstanding Universal Value
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Together the five components represent an outstanding example of human land use and settlement in the arctic based on two distinct farming cultures based on animal husbandry and marine mammal hunting – Norse Greenlandic culture (10th-15th centuries) and an Inuit culture (from 18th century to the present);
- The Norse Greenlandic culture in this area represents the earliest introduction of farming to the Arctic, and is the first European settlement in the ‘New World’;
- The cultural landscape has been shaped by grazing in both historical periods, in an environment that is marginal for farming;
- The landscape represents a comprehensive range of sites of Norse Greenlandic culture, including examples of monumental architecture.

ICOMOS considers that this justification is appropriate; and that the serial approach is justified on the grounds that a range of farming sites and settlements are needed to represent the cultures that have contributed to the cultural landscape (including the Thule Inuit hunters). ICOMOS does not consider that the conceptualisation of the two major cultural-historical periods as demonstrating a ‘continuity’ or ‘symbiosis’ is necessary, since it is the uses by diverse cultures and their interactions with the environment at different time periods that lends distinctive interest and importance to the cultural landscape.

Integrity and authenticity

Integrity
The integrity of the nominated property is based on the inclusion of a range of farming landscape elements that ensure that the property contains all the elements
necessary to convey the proposed Outstanding Universal Value.

ICOMOS considers that the components of the serial nomination include key attributes of the Norse and current farming systems; and that each also illustrates different facets of the land use patterns, landforms and cultural histories. Some juxtapose modern and Norse farms (eg. Igaliku); while others are relict archaeological landscapes where grazing occurs (eg. Hvalsey).

ICOMOS considers that although the nominated property is fragmented, it is large enough to include sufficient representation of the landscape and archaeological attributes related to the proposed Outstanding Universal Value; and that processes associated with Norse settlement and modern farming are exhibited within the boundaries of the five components. The nominated components are of sufficient size to sustain continued agricultural uses.

ICOMOS considers that the condition of the attributes is satisfactory, and that while there are a range of potential threats, these are adequately managed at present. However, the range and scale of proposed mining, energy and infrastructure development projects in this area of southern Greenland adds to the potential threats on the ability to retain the integrity of the serial property.

ICOMOS considers that the authenticity of the whole series has been justified through the Additional Information provided by the State Party. The integrity of the individual components that comprise the series has been demonstrated, but are vulnerable, particularly in light of the potential for nearby and large-scale mining, energy and infrastructure projects and the lack of full protection for the buffer zones. This adds vulnerability to the attributes of the property.

Authenticity

The authenticity of the nominated property is based on the pastoral character of the landscape, which was introduced from the 10th century AD; the archaeological evidence of Norse Greenlandic settlement and farming found at a number of sites within the nominated components; and the form, materials and design of farm buildings and monumental architecture from both historical periods. ICOMOS considers that the settlement patterns of the Norse landscape are legible in and between the selected components; but that the post-18th century landscape is less clearly visualised, especially in terms of the relationships between parts and elements of the landscape. Further research, mapping and interpretation is recommended.

Conservation of architectural attributes has aimed to ensure their structural stability; and most archaeological sites have not been modified by human activity since their abandonment. Detailed historical documentation supports the authenticity of many attributes.

ICOMOS considers that the authenticity of the whole series has been justified; and that the authenticity of the individual sites that comprise the series has been demonstrated.

In conclusion, ICOMOS considers that the conditions of authenticity and integrity of the whole series has been justified. For individual sites, the conditions of integrity and authenticity have been met, although their integrity could become vulnerable due to the future impacts of mining, energy and infrastructure projects; and the lack of full protection for the buffer zones.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criterion (v).

Criterion (v): *be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;*

This criterion is justified by the State Party on the basis of the unique farming traditions that have developed in southern Greenland. Although marginal for farming, Kujataa’s relatively mild climate has allowed the development of settlements based on farming and hunting during two major historical periods (including the present period), resulting in a distinctive and vulnerable cultural landscape.

ICOMOS considers that the phases of Norse Greenlandic and European-Inuit settlement have resulted in a remarkable and distinctive cultural landscape based on land use practices within a specific ecological niche that could support farming and pastoralism when complemented with the hunting of marine animals. The specific climatic conditions that allowed two different cultural traditions to develop land use, settlement and subsistence within this extreme setting have allowed the Inuit farming landscape to reveal and visualise the earlier Norse settlements in an exceptional way.

The State Party identifies a number of Thule hunter-gatherer sites as attributes within the nominated property, but the links to the proposed justification of Outstanding Universal Value are not well made. Given the importance of the Thule Inuit within the sequence of cultural histories of Greenland, ICOMOS considers that the understanding of the nominated property as a cultural landscape would be enhanced if this aspect were better tied into the overall narrative in relation to the human adaptation to environmental conditions, and the Inuit shift to more sedentary land use patterns and lifestyles. ICOMOS also notes that the Thule Inuit sites are archaeologically important and deserving of conservation and inclusion in interpretation in their own right, and welcomes the State Party’s interest in
continuing to encourage research into this aspect of the past.

Based on advice from IUCN, ICOMOS also notes that the nominated area contains significant geological features. The Gardar Province contains an important record of one of the earliest known rifting events, and a well preserved record of intrusive and volcanic igneous sequences that have been researched by geologists for over a century. While the State Party has not proposed the consideration of criterion (viii), these important natural values should nevertheless be recognised and well managed within the nominated property.

In conclusion, ICOMOS considers that criterion (v) has been justified and the conditions of authenticity and integrity have been met.

**Description of the attributes**

The attributes of the property are: the structures and archaeological sites and artefacts associated with the Norse settlement of Kujataa; the home fields of the farms, pasturelands and meadows; vegetation patterns associated with farming and grazing; the landscape settings (including landforms and ecological characteristics) of the five components; historic routes and roads; Inuit farming houses and associated buildings (listed historic buildings). The State Party has also identified a wealth of intangible attributes of the potential Outstanding Universal Value of the property, including language, historical place names, ecological knowledge, crafts and seasonal rituals and activities.

**4 Factors affecting the property**

Agriculture, tourism and mining are the key economic drivers for the southern region of Greenland, and part of Greenland’s efforts to achieve greater autonomy.

Agricultural practices are integral to the proposed values of the nominated property, but can also pose pressures through overgrazing and through the impact of farming activities on archaeological resources such as Norse stone structures. Government authorities have recently introduced new requirements that prevent winter grazing throughout the region in order to reduce erosion and improve the health of the flocks. Otherwise, sheep move freely through the grazing lands, but do not seem to have a significant direct impact on the archaeological resources.

ICOMOS considers that the attributes of the current farming landscape could be vulnerable to future intensification of agriculture, including the move to larger farms and larger flocks to improve their economic viability (this was confirmed by the State Party as possible future change). Introduction of new crops is also possible in the future, but without much analysis of the impacts on the attributes of the potential Outstanding Universal Value.

The Additional Information provided by the State Party indicates that the limited extent of arable land in Kujataaa precludes major extension or reorganisation of farming land. Continued intensification (fertilisation, irrigation, draining of meadows) can be expected, as well as an increase in the number of smaller plots. These are considered unlikely to affect the existing home field layouts. There is therefore some awareness by the State Party about these issues, but more specificity about the attributes that should be maintained in contexts of change should be incorporated into the management system for the nominated property.

The environmental conditions of the nominated property are considered fragile. Natural processes of erosion are evident throughout the nominated property, including coastal areas and mountain areas. In some cases, archaeological evidence could be uncovered through erosion. This requires ongoing processes of survey and monitoring of the condition of archaeological sites.

The State Party notes that environmental pressures due to climate change can be observed throughout the property. Sea level rise, coastal erosion, and increased temperatures are recognised, and there are different climate scenarios for the effects on precipitation. The greatest potential pressures are those that could impact on the viability of agriculture and the length of the growing season. The State Party has also recognised the potential impacts on the preservation of archaeological materials and historic buildings, and notes the possible future need for irrigation systems.

While the nominated property is exempt from mining by the Government of Greenland, mining is a significant economic activity and is expected to contribute significantly to future employment. Additional information provided by the State Party explained that mining concessions now surround most of the components following the relinquishing of mining concessions that formed a necessary part of the World Heritage nomination process. These are exploration rather than exploitation licenses and no mining activity is current, with the exception of the ‘TaNiBREEZ project’ (within 5 km of component 5) and ‘Kvanejfield’ (20 km from component 5) which are undergoing Environmental Impact Assessment. The State Party is confident that there will no impacts on the nominated components, and the views of the Steering Group of the Kujataa World Heritage project will be sought.

The most imminent future pressure is likely to arise from the exploration of numerous areas near to the nominated components; and the possible exploitation of a rare earth and uranium mine associated with the Ilmaussaq intrusive complex, located approximately 15-20 km from the Qassiarusuk, Sisivluttoq and Qaqortoqcuq components. Some stakeholders have voiced concerns about the impacts include uranium contamination of grazing areas and on the health and safety of residents and visitors. The project is subject to assessments of the impacts on health and the environment, and the economic viability of the project has not yet been demonstrated.
ICOMOS considers that Environmental Impact Assessment processes are often inadequate for assessing the impacts of proposals on the cultural values of World Heritage properties, and strongly recommends the urgent development of 'Heritage Impact Assessment' processes for these and other proposed mining and development projects.

ICOMOS also notes that such mining projects can require significant infrastructure works beyond the mining areas themselves. For this reason, the identified projects are inevitably sensitive given that they are near the nominated property, and represent potential projects of significant scale and economic value.

Infrastructure development inside and surrounding the nominated property has the potential to impact on its values. According to the additional information received from the State Party, currently planned projects include a new water supply system for Igaliku (2017); waterworks for Qassiarsuk (2017); road and bridge construction to connect Narssarsuaq with Qassiarsuk, and Igaliku with Sissarluttoq; extension of the Qorlotorosuaq hydropower plant (12 km east of the nominated area), including a dam, road access and small harbour (2017-2018); and a new airport 6 km north of Qaqortoq that will support tourism to the nominated property as well as movements within Greenland (2018-2020). A renewable energy pilot project was initiated on the northern outskirts of Igaliku in 2016, with modifications to the locations and size of wind turbines made to minimise visual impacts. Smaller projects include building modifications, and new houses, particularly at Igaliku.

The Greenland government and Kujalleq municipality have demonstrated some capacity to identify and address the impacts of infrastructure projects and take mitigating actions. A major transmission line was buried several years ago in Hvalsey to protect the visual integrity of the nominated property; and a proposed renewable energy project at Igaliku has recently been moved to a much less visible location.

ICOMOS considers that it would be desirable that the State Party consider the integration of a Heritage Impact Assessment approach into the management system, so as to ensure that any programme or project regarding the property be assessed in relation to its impacts on the Outstanding Universal Value and its supporting attributes. All major projects that could impact on the series should be communicated to the World Heritage Committee in line with paragraph 172 of Operational Guidelines for the Implementation of the World Heritage Convention.

Currently visitor impact is minimal, as well as transport infrastructure. Most tourists are dependent on tour operators for access to the nominated components. In the future, visitor numbers are expected to increase, and new/improved infrastructure such as roads, wharves and visitor services might be required at Igaliku, Kujalleq, Qassiarsuk and Sissarluttoq. The Government of Greenland as decided to build a new airport at Qaqortoq; and regional visitor centres are being considered. An independent organisation is being established to operate and staff the regional visitor centres, but this is not yet in place. The Municipality has established and funded a destination management company (Destination South Greenland) to support product development.

ICOMOS considers that the long-term management of tourism could be considered in more depth, and give more attention to the interpretation programs, and to the social and cultural pressures that could arise.

Aside from the ongoing environmental pressures (including those associated with climate change), ICOMOS considers that the main threats to the property are mining and infrastructure development, and intensification of agriculture; and that greater attention and detailed planning is needed for the area’s tourism management.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the five components have been drawn utilising the low tide mark, and follow topographic features (rivers, lakes and occasionally contour lines). Key attributes are included within these boundaries. While the boundaries are arbitrarily drawn to allow a representative set of components to be included, ICOMOS has no specific concerns with the boundaries provided.

The additional information provided by the State Party confirms that the process of developing the World Heritage nomination involved the relinquishing of mining concessions in some areas. ICOMOS considers that this is a pragmatic rationale, but that the boundaries are not legible on the ground in all cases, and do not fully include associated waterways.

In the submitted nomination, no buffer zones were established for the components of the serial nomination. The State Party had justified this on the basis that each component has been drawn in order to include all necessary attributes of the cultural landscape; and that all boundaries have been established at least 100m away from any known archaeological sites. The system of legal protection creates protective zones around many of the attributes. The legislation for Cultural Heritage Protection and Conservation establishes a zone of protection of 20 metres for all ancient monuments (which allow agricultural cultivation within 2 metres from a monument). Municipal planning mechanisms provide wider protection zones around ‘cultural heritage areas’ such as the ruin groups at Sissarluttoq and Hvalsey. No agricultural activities are permitted in these areas other than summer sheep grazing. Important ruins in Qassiarsuk and Igaliku also have protection zones provided through municipal planning mechanisms. ICOMOS also notes that the
‘blanket protection’ for heritage resources in Greenland applies to all areas outside the drawn property boundaries.

Based on exchanges with ICOMOS, in February 2017 the State Party established a buffer zone around component 1, and another buffer zone, which encompasses components 2, 3, 4 and 5. The establishment of the buffer zone provisions is implemented through the new Municipal Plan for the Kujalleq Municipality (2017-2018), utilising the land management regulatory framework. The Kujalleq Municipality has also recognised complementary requirements to ensure the continued integrity of farming landscapes and agricultural and pastoral land uses.

ICOMOS welcomes the State Party’s decision to establish buffer zones for the components of the serial property due to the potential for significant pressures in the nearby areas. However, the information provided by the State Party clearly shows that there are mining exploration licenses throughout the newly applied buffer zones, raising serious concerns about the ability of these buffer zones to act as an added layer of protection to the nominated property (Operational Guidelines, par. 104). More work is needed on the protection measures for the buffer zones, including clear objectives that are tied to the ability of the Outstanding Universal Value of the nominated serial property to be sustained.

ICOMOS considers that the boundaries of the nominated property and the recently established buffer zones are satisfactorily delineated, but that there is insufficient protection provided to the buffer zones. The existence of mining exploration licenses throughout most of the buffer zone areas is of particular concern; and ICOMOS questions whether there will be future conflicts between mining and agricultural/pastoral uses that support the continuing cultural landscape. Continued work to clarify the permitted land uses and specific protective mechanisms in the buffer zones is needed.

Ownership
There is no private ownership in Greenland, and all land is owned by the Government of Greenland. There is a system of allotments of land that legally permit use of public lands for private purposes for specified periods of time. All ancient monuments pre-dating 1900 are owned by the Government of Greenland and administered by the Greenland National Museum and Archives. Some buildings within the nominated property are privately owned.

Protection
A number of legal protection mechanisms apply to the nominated property: Heritage Protection Act (Act no. 11, 19 May 2010) on Cultural Heritage Protection and Conservation; Executive Order on Cultural Heritage Protection (approved in July 2016, and entered into force on 1 August 2016); the Museum Act (Inatsisartut Act no. 8, 3 June 2015); and the Planning Act (Act no. 17, 17 November 2010). In addition to protection of material cultural heritage, the Museum Act protects immaterial (intangible) culture heritage in accordance with the 2003 UNESCO Convention on the Safeguarding of the Intangible Cultural Heritage (ratified by Denmark in 2009).

A number of legal mechanisms apply for the protection of natural heritage, agriculture and grazing, mineral resources activities, construction, development, sanitation and public roads, large-scale construction projects, use of hydropower, harbour and cruise ship passenger taxes, and tourism.

Mining approvals are subject to strict legal and policy requirements through the Mineral Resources Act (7 December 2009). Exploitation licence applications are subject to Environmental Impact Assessment and Social Impact Assessment (each with public hearing and consultation requirements); and must have an impact mitigation plan. The Greenland National Museum and Archives can require archaeological investigations.

The Heritage Protection Act creates protection for ancient monuments, historic buildings and historical areas. All ancient monuments in the property are protected by the Greenland Parliament Act on Cultural Heritage Protection and Conservation. Listed buildings within the property are protected by Greenland laws and municipal planning. Because property is not privately owned, activities and constructions require permits to the Kujalleq municipality or the Greenland Government. The Greenland National Museum and Archives is the responsible authority and provides advice to owners. Demolition is prohibited and alterations are controlled.

Protection of the landscape and natural attributes is provided by a wide range of laws and planning regulations, including the Acts on Preservation of Natural Amenities, Environmental Protection and Catchment and Hunting; and there are laws pertaining to the different land uses within and outside the nominated property. The Nature Protection Act (Act no. 29, 18 December 2003) provides for the management of landscape values and the sustainable use of natural resources, including agriculture. However, the coordination of so many legal mechanisms is not straightforward. ICOMOS therefore considers that the Executive Order on Cultural Heritage Protection (July 2016) provides the essential for the overall protection of the proposed World Heritage property.

ICOMOS notes that changes to the status of Greenland (2008-2009) have resulted in increased autonomy and responsibility, as well as added pressure to the budget.

ICOMOS considers that the legal protection in place is adequate.

Conservation
The Norse archaeological resources within the nominated components have been inventoried for almost a century; and the most well-known sites such as Hvalsey and Gardar have been recorded in detail, including the location of each stone so that any that fall can be replaced.
Modern technologies of recording have assisted this detailed recording. Active conservation measures include survey, recording, stabilisation and some anastylosis oriented at sustaining the integrity and legibility of the elements.

The State Party acknowledges that research about the sites within the property is ongoing, and that there is still much to learn about them. The efforts to record and document Palaeo-Eskimo and Thule Inuit sites has been less systematic. Many historic structures have been inventoried, but work is continuing on both the recording and assessment of significance. Some adaptive reuse of historic buildings has occurred.

The inventorying of landscape features is less comprehensive. For example, there are unanswered questions about the antiquity of some road alignments. Landscape features, such as roads, field patterns, landforms and sight lines are maintained by the farmers.

ICOMOS considers that the state of conservation of the archaeological sites is good, although natural processes of erosion are a continuing pressure; excavations at Hvalsey in the 1930s have disturbed the ruins of the dwellings and other farm structures and reduced the readability of these attributes. Occasionally, dry stone structures collapse; as a precautionary approach, archaeologists record the location of each stone, allowing them to be repositioned when collapses occur. Maintenance of ruins involves stabilising stone walls in order for them to remain legible.

The condition of the 19th and 20th century historic structures is generally good (Qassiarsuk and Igaliku). Many of these are lived in which supports their conservation.

The condition of the landscape (landscape patterns, range of landscapes, relationship between historic structures and modern buildings) is generally good, due to the continued use for agriculture.

ICOMOS considers that while active conservation actions and maintenance are needed on an ongoing basis, the state of conservation of the attributes of this nominated property is good. ICOMOS recommends that inventorying activities be expanded to include historic landscape features.

Management

Management structures and processes, including traditional management processes

A Steering Committee has been established with representatives from the Government of Greenland, the Greenland national Museum and Archives, Kujalleq Municipality, village councils, sheep farmers, the Danish Agency for Culture and the tourism industry.

ICOMOS considers that the current basis for the Steering Committee rests on relatively informal understandings between its members. Its roles and responsibilities could be formalised and conflict resolution procedures should be developed.

Day to day management is the responsibility of a local secretariat, headed by a site manager and park rangers. Staffing levels and expertise available seem adequate, particularly for the Norse archaeological sites; however, additional staffing capacity and expertise in tourism management is desirable. Archaeological investigations and recording are undertaken by archaeologists under permit by the Government of Greenland (National Museum and Archives); and work on historic structures is done under the direction of the government heritage architect. Academic institutions are encouraged to carry out archaeological research.

Financial resources are provided annually by the Government of Greenland, Kujalleq Municipality and Danish Agency for Culture and Palaces. Overall, the financial resources for conservation work and maintenance are modest, raising questions about whether there is sufficient secure funding for conservation and maintenance works (especially urgent issues). Conservation projects are dependent on third party funding sources; and some capital for infrastructure projects seems depending on developer contributions. An ‘agricultural consultancy service’ is provided by the Government of Greenland to advise farmers. The State Party is considering the introduction of admission charges for visitor access to tourism sites and/or specific taxes for tourism.

There are no particular threats associated with natural disasters in this part of Greenland, and risk preparedness is focused on fire response and sea rescues.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan was developed by a working group with representatives from the key Greenland and local government authorities, and sets out agreed objectives. Currently, various decision-making bodies have authority for certain aspects of the nominated area, and implements these through individual plans. Coordination is therefore a central issue. There are Actions Plan planned for each of the five components for ruin preservation and agricultural development. A site manager is expected to be employed in 2017.

Additional information provided by the State Party outlines relevant provisions of the National Tourism Strategy (2016-2020). It aims to enhance tourism to Greenland by reduced airfares and improved infrastructure, marketing training and development of new visitor centres. New harbour developments and airport planning are part of this Strategy, with the aim of doubling tourist air traffic by 2040.
The Tourism Strategy of the Kujalleq Municipality (2015-2020) has a focus on improved coordination and branding initiatives. The focus of the branding is on the Arctic Vikings and agro-tourism. Agro-tourism is being developed through web-based marketing between the farmers’ cooperative Icelandic farm holidays and Visit Greenland (the national tourism board). The World Heritage nomination is an important objective for enhancing tourism to the area in each of these strategies. Improved transportation access, security and weather warning systems are part of the implementation of improved tourism. One or more visitor centres are envisaged, along with trails and farm tourism.

Visitor access to the nominated property is challenging. Most visitors arrive via cruise ships that dock at Qaqortoq or the airport at Narsarsuaq, and then access other areas by boat or helicopter. Other than the wharf at Hvalsey, the wharves are designed for transportation ships rather than the smaller boats typically used for visitors. Disembarkation can require jumping or use of steep ladders. Improving these small ports for visitors is planned. The existing visiting cruise ships come from the east coast of the United States or western Europe (about 20 in 2016), but this is likely to increase in the future.

In general, visitor management is not clearly organised. For example, there are few locations that have basic visitor services such as first aid, restrooms and water. The State Party has indicated that a visitor centre could be developed in the future; this is supported in principle, but plans should be communicated at an early stage to the World Heritage Committee in line with paragraph 172 of Operational Guidelines for the Implementation of the World Heritage Convention.

Interpretation is minimal and varies in quality. Efforts are made to guide visitors along paths to avoid impacts on archaeological sites or conflict with farming activities. Brattahlid (Qassiarsuk) has interpretive structures including a church, an Inuit winter house and a long house; but there are questions about the accuracy of the Inuit winter house and the archaeological resources are minimally interpreted. There is some interpretation in the church at Igaliku. Interpretation panels are provided at Gardar and Hvalsey, but none are not provided at Igaliku Kujalleq, Sissarluttoq or Upernaviarluk (although something is planned at these locations).

There are three local museums near the nominated components. There is a privately established community museum at Narsarsuaq with a World Heritage exhibition; and there are public museums at Narsaq and Qaqortoq, both with Norse artefacts in their collections. In general, there is little opportunity for visitors to gain a deeper understanding about the significance of the property or to experience the cultural traditions of the living community. The government of Greenland is considering consolidating visitor activity in visitor centres in each region, and the one for the municipality of Kujalleq would be located in Qaqortoq. This could provide an opportunity for improved interpretation, but the plans are currently undefined.

Accommodation for visitors within the nominated property is limited. Narsarsuaq and Igaliku have modest hotel/hostel accommodation, while Qaqortoq has a wider range of hotels. The most common accommodation is in tents or guest house rooms in farms, sometimes as part of a package.

Involvement of the local communities
The population within the components of the nominated property is small, and it appears that the engagement of local people in the nomination and management processes are good.

ICOMOS considers that the management system for the overall serial property is adequate, although the resources for implementation could be increased, and additional mechanisms are needed for sustained and direct engagement with authorities responsible for mining approvals and monitoring.

ICOMOS considers that the management plan provides a sound framework for decision-making, together with the operation of the Steering Committee, but that coordination amongst relevant organisations should be strengthened.

ICOMOS recommends that a higher priority be placed on further elaboration of tourism management planning; including the enhanced engagement of local people in interpretation.

6 Monitoring
The State Party has indicated that monitoring arrangements were introduced in 2016 in order to generate some baseline data for the ongoing monitoring arrangements. Key indicators for measuring the state of conservation of archaeological sites, historic buildings, farming lands and tourism levels have been identified, along with the timing/frequency and responsibilities of various Greenland and municipal authorities.

ICOMOS notes that the monitoring system is yet to be fully implemented; and suggests that the monitoring arrangements for tourism developments and impacts need further elaboration (in association with the further development of tourism management planning).

ICOMOS considers that the monitoring arrangements are satisfactory, but recommends that they be more explicitly focused on the attributes of Outstanding Universal Value.

7 Conclusions
The extraordinary cultural landscape of Kujataa is comprised of dramatic natural features and processes that have shaped the layers of Norse Greenlandic and modern European/Inuit farming traditions. This is a compelling testimony of continuity and discontinuity of
settlement and highly adapted land uses by different cultures over a long expanse of human history. Cultural histories of in-migrations of Palaeo-Eskimo cultures, Norse farmers, Thule Inuit hunters and Inuit farming communities have developed in this very marginal farming landscape through a mix of farming, grazing and hunting of marine mammals. All of these cultural traditions have also contributed to the cultural landscape which is distinctive for its two cultural histories of farming and pastoralism.

From the 10th century AD, Norse colonists from Iceland led by Eiríkr rauði (Erik the Red) settled in this area for a period of approximately 500 years. The Norse settlement of Eystribyggð is the focus of Kujataa, and from the 13th century, Norse Greenlandic settlements had their own bishop, ecclesiastical and secular administrations, farms and trade networks. The disappearance of the Norse from Greenland in the 15th century is not well understood.

Thule Inuit peoples have lived in Greenland from at least the 13th or 14th century, and in Kujataa from at least the 15th century; and in the late 18th century Inuit families began farming in the same locations that had formed the nucleus of the Norse settlements centuries before. Inuit farming continues today.

Farming and grazing traditions by Norse and Inuit peoples have involved adaptations to the arctic conditions, deep understanding of the environmental context, and the ability to locate fertile land to grow grass and identify grazing areas. In Norse times, the cattle herds would graze in the hills and would return to the pens during the winter months. During those months, they would winter graze in the farm surroundings and would consume grass produced at the farm. This is apparent based on the types of archaeological structures and the natural setting. That tradition remains strong even though its genesis stems primarily from the revial of farming in the 18th century, and the successful professionalization of farming operations in the 19th and 20th centuries. The setting remains evocative of the harsh environmental conditions and the relationship with the fjord for transportation and hunting.

ICOMOS considers that the comparative analysis is comprehensive in its consideration of other subarctic farming areas and Norse sites, and that Additional Information provided by the State Party has explained the basis for the selection of the five components. Continued work to understand the inter-related components of the cultural landscape contributed by all phases of human history in southern Greenland is strongly encouraged.

ICOMOS finds that the nominated cultural landscape meets criterion (v) and has a strong potential to meet the requirements of Outstanding Universal Value. ICOMOS considers that the requirements of authenticity and integrity of the whole series have been met. The authenticity and integrity of the individual components that comprise the series have been demonstrated, but the integrity could become vulnerable due to nearby and large-scale mining, energy and infrastructure projects.

While the two primary historical periods are significant and legible, the appreciation of Kujataa as a cultural landscape could continue to be improved. Moving beyond a thorough description of sites, ruins, buildings and other attributes to an understanding of the functioning of these historical landscapes and the inter-relationships between the elements is needed to see them as parts of several systems of land use and settlement. ICOMOS considers that the State Party has the knowledge and capacity to do this, and urges this further work as a matter of priority.

ICOMOS considers the landscape to be vulnerable now and into the future. Aside from the ongoing environmental pressures (including those associated with climate change), ICOMOS considers that the main threats to the property are mining and infrastructure development, and the potential for future intensification of agriculture. Greater attention and detailed planning for the area’s tourism management is also a priority.

ICOMOS also considers that all major projects that could impact on the series should be communicated to the World Heritage Committee in line with paragraph 172 of Operational Guidelines for the Implementation of the World Heritage Convention. It will be essential in the future for all projects to be evaluated through Heritage Impact Assessments on the contribution of each of the component sites to Outstanding Universal Value. It is for this reasons that clearly defined monitoring indicators relating to the attributes of Outstanding Universal Value are so essential for all component sites.

ICOMOS considers that the delineation of the boundaries of the nominated property and the recently established buffer zones are adequate; but that there is insufficient protection provided to the buffer zones, especially in light of the existing mining exploration leases throughout these areas. Continued work to clarify the permitted land uses and specific protective mechanisms in the buffer zones is urgently needed.

ICOMOS considers that the legal protection of the property is sufficient, other than the continuing uncertainties about the legal protection of the buffer zones. While active conservation actions and maintenance is needed on an ongoing basis, the state of conservation of the attributes of this nominated property is satisfactory. The management system for the overall serial property is adequate, although the resources for implementation could be increased, and additional mechanisms seem necessary for sustained and direct engagement with authorities responsible for mining approvals and monitoring.

ICOMOS considers that the management plan provides a sound framework for decision-making, together with the operation of the Steering Committee, but that coordination amongst relevant organisations should be strengthened. A higher priority should be placed on
further elaboration of tourism management planning; including the enhanced engagement of local people in interpretation.

In the additional information received in February 2017, the State Party, at ICOMOS’s request, suggests that the name of property could be changed from ‘Kujataa - A Subarctic Farming Landscape in Greenland’ to ‘Kujataa Greenland: Norse and Inuit Farming at the Edge of the Ice Cap’.

8 Recommendations

Recommendations with respect to inscription
ICOMOS recommends that the nomination of Kujataa Greenland: Norse and Inuit Farming at the Edge of the Ice Cap, Denmark, be referred back to the State Party in order to:

a) Further clarify the permitted land uses and provide specific protective mechanisms in the buffer zones (including protection from mining exploration and extraction in these areas);

Additional recommendations
ICOMOS recommends that the State Party give consideration to the following:

a) Developing and implementing ‘Heritage Impact Assessment’ as a matter of urgency for development proposals (including mining exploration and extractions), and changes to agricultural land uses (such as moves to larger farms and changes to farming practices and crops),

b) Ensuring that all major projects that could impact on the Outstanding Universal Value of the series are communicated to the World Heritage Committee in line with paragraph 172 of Operational Guidelines for the Implementation of the World Heritage Convention,

c) Continuing to improve the understanding of the different cultural/historical periods of settlement and use of this area by improving the mapping of hunting resources; survey, archaeological research and documentation of Palaeo-Eskimo and Thule Inuit sites; inventorying of historic landscape features; and enhanced recognition and presentation of intangible cultural heritage of the area,

d) Further developing the management system to address the ways in which changing agricultural land uses can ensure the conservation of the agricultural and pastoral landscape attributes of the serial property,

e) Developing and implementing mechanisms for direct engagement with authorities responsible for mining approvals and monitoring in the management system for the serial property,

f) Incorporating important geological heritage values of the property into the interpretation and management system,

g) Further developing tourism management planning for the property;
Map showing the revised boundaries of the nominated properties
A subarctic farming landscape

Igaliku Kullajeq plain with Norse ruins and modern buildings
Norse bishop’s tithe barn in Igaliku

Ruins of main dwelling at Hvalsey