

# An inventory of the communication of the World Heritage OUV in the Wadden Sea Area



# An inventory of the communication of the World Heritage OUV in the Wadden Sea Area

## Thesis Research

*Providing an overview on what and how there is communicated about the Outstanding Universal  
Value of the Wadden Sea World Heritage in the visitor centres.*

### **Problem owner**

Anja Szczesinski

Coordinator International Wadden Sea School

### **Supervisors**

Peter Smit

Lecturer Coastal and Marine Management

Jorien Rippen

Lecturer Coastal and Marine Management

### **Students**

Cheyenna de Wit

Coastal and Marine Management

Student number: 000008009

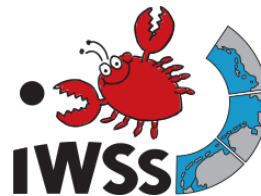
Cheyenna.dewit@gmail.com

Lonneke Bitter

Coastal and Marine Management

Student number: 000009618

Lonnekebitter@hotmail.com



Van Hall Larenstein  
University of Applied Sciences  
Agora 1, 8901 BV Leeuwarden

Source cover photo: Benji Rietman, 2019

## Acknowledgements

This thesis was commissioned by the International Wadden Sea School and written within the frame of the bachelor Coastal and Marine Management, from October 2019 until June 2020. Writing and creating a thesis is always a big and new adventure. And you consider that certain things are changeable, and things will not always go as planned. Nothing was truer concerning us writing this thesis during a global pandemic.

And that brings us to our first thank you: Jorien Rippen and Peter Smit. They were there for us every step and change of the way and adapted to every situation that life -and we- threw at them. They helped us a lot in using the right methods, transforming our vision into research and lending a helping hand when we needed one.

Secondly we would like to thank the coordinator of the International Wadden Sea School; Anja Szczesinski for giving us the opportunity to learn a lot about education in de Wadden Sea Area and showing us what a challenge it can be to try to fit everything you want to find out in a small timeframe. Anja, you trusted 2 Dutch girls, 350 kilometres away, to research a subject that is important to you; thank you for your trust, time and expertise.

And we would really like thank all the visitor centres that answered our survey and that were willing to be interviewed to provide us with all the insights that we needed in order to write this report. Even though we could not meet them face to face, they were willing to talk to us, bracing all the limitations that video calling can have.

And finally, we would like to thank our parents for giving us the support we needed, bringing us a cup of tea when we were writing and for letting us use their WIFI during this -mostly- online, quarantined research.

Enjoy reading!

Cheyenna de Wit and Lonneke Bitter

Noordwijkerhout, August the 21st 2020

## Abstract

*The Dutch and German Wadden Sea Area received the World Heritage status in 2009 because of its Outstanding Universal Value (OUV) which embodies: cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. Denmark received this status in 2014. Since the beginning of the World Heritage status, the International Wadden Sea School (IWSS) aims to educate visitors of the Wadden Sea Area on the importance of this special area (IWSS, n.d.). A key challenge has been to link the concept of Outstanding Universal Value (OUV) in a consistent manner to the visitors of the area (personal communication, 18 November 2019). The IWSS would like to have an overview on what the visitor centres in all three countries communicate about the OUV as well as how they communicate this and would also like to see so-called 'good stories' from the educationalists in different centres. 'Good stories' are examples of successful ways to conveying the message of the OUV. This led to the following research question: 'What and how do the different visitor centres communicate about the Outstanding Universal Value of the Wadden Sea World Heritage to their different target groups and which 'good stories' exist that communicates this value?' Of the 60 online surveys that were send-out to the visitor centres, 22 were filled in. Based on these 22 surveys, the ones with good stories were selected for an interview. Based on these interviews, their survey answers and literature research, the following can be concluded: most of the visitor centres communicate one or more criteria of the OUV. The message that the centres want to bring across is mainly to let people experience the beauty of the Wadden Sea area and its surrounding environment. Tours are the most used medium to accomplish this. A lot of information is also shared during verbal presentations and using film and flyers. Different centres have different good stories, there is not just one good story that conveys all of the OUV aspects. Most centres have a need for one analogous story conveying the OUV. After this research, it is recommended to gather more data about the specifics of the existing good stories and hereby also look into the situation in Denmark. The visitors of the centres should be asked for feedback more frequently and more meetings should take place withing the IWSS.*

## Table of contents

Glossary of terms and abbreviations.....	5
1 Introduction.....	6
1.1 Problem statement.....	12
1.2 Aim.....	12
1.3 Research questions.....	12
1.4 Reading guide .....	12
2 Methods .....	13
2.1 Research area .....	13
2.2 Operationalisation and research process.....	13
2.3 Data collection.....	16
2.4 Data Analysis .....	18
3 Results .....	20
3.1 Demographics.....	20
3.2 What is being communicated about the OUV in the different visitor centres right now? .....	21
3.3 How is the concept of the OUV being communicated? .....	24
3.4 Which ‘good stories’ are present that communicate the OUV? .....	25
4 Discussion .....	32
5 Conclusion and Recommendations .....	35
Literature .....	37
Appendix I: The visitor centres.....	i
Appendix II: Blueprint online survey .....	iii
Appendix III: Questions online survey.....	vi
Appendix IV: Blueprint Interviews.....	viii
Appendix V: Interview guide .....	x
Appendix VI: The results from the online survey .....	xii
Appendix VII: Results of the interviews.....	xxv

## Glossary of terms and abbreviations

### Abbreviations

International Wadden Sea School	IWSS
Common Wadden Sea Secretariat	CWSS
United Nations Educational, Scientific and Cultural organization	UNESCO
Outstanding Universal Value	OUV
World Heritage Site	WHS
Trilateral Wadden Sea Cooperation	TWSC

### Glossary of terms

World Heritage:	‘Heritage that has ‘Outstanding Universal Value’ (OUV)’ (UNESCO World Heritage Centre, n.d.-a).
World Heritage Convention:	‘An international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972’(UNESCO World Heritage Centre, n.d.-a).
The World Heritage list:	‘A list with Heritage from all over the world that has ‘Outstanding Universal Value’ (OUV)’ (UNESCO World Heritage Centre, n.d.-a).
Outstanding Universal Value:	‘Cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole’ (UNESCO World Heritage Centre, 2019).
World Heritage Committee:	‘This Committee consists of 21 representatives from the States Parties and they get elected by their General Assembly. This Committee not only decides which sites get inscribed, but it is also responsible for the implementation, how the fund gets divided and it provides financial assistance when needed (UNESCO World Heritage Centre, n.d.-b).
UNESCO:	‘The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity’ (UNESCO World Heritage Centre, n.d.-a).
Network Group Education:	‘The IWSS coordinator (at present provided by WWF Germany) serves as a key facilitator of the Trilateral Education Work Programme and closely cooperates with the Common Wadden Sea Secretariat as well as with the regional representatives of Wadden Sea Education. Together, they constitute the Network Group Education.’ (Common Wadden Sea Secretariat, 2018)



## 1 Introduction

The Wadden Sea islands are the perfect location to escape from busy lives and enjoy the calm and beautiful nature. For many tourists, whether they are from the Netherlands, Germany, Denmark or other countries, their holiday starts from the moment they leave the mainland. They go to the islands to enjoy the beach, visit the different villages and museums or explore the wildlife of the Wadden. Though the Dutch and German Wadden Sea Area got the World Heritage status in 2009 because of its Outstanding Universal Value, the beauty of this special area is still taken for granted by some people or they do not recognize the term World Heritage. Since the beginning of the World Heritage status, the International Wadden Sea School (IWSS) aims to educate visitors of the Wadden Sea Area of the importance of this special area (IWSS, n.d.).

As the Danish part was added in 2014 the whole Wadden Sea Area got the UNESCO World Heritage status. Around the world there are 1121 sites that have this status. UNESCO stands for 'United Nations Educational, Scientific and Cultural organization' and is best known because of the World Heritage Convention and the World Heritage list. This treaty from 1972 aims to preserve and protect heritage that has 'Outstanding Universal Value' (OUV) and encourages to establish management plans to protect sites that are on this list. These sites can vary from natural to cultural sites to sites that are a mix of these two (UNESCO World Heritage Centre, n.d.-a). The World Heritage Committee decides whether a site gets inscribed in this list and they follow the Rules of Procedure in order to do this. This Committee not only decides which sites get inscribed, but it is also responsible for the implementation, how the fund gets divided and it provides financial assistance when needed (UNESCO World Heritage Centre, n.d.-b).

The OUV embodies: 'cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole' (UNESCO World Heritage Centre, 2019). An area must meet at least one of the ten criteria that are set in order to get the World Heritage status. These criteria are not only nature based, but also based on architectural, cultural and historical aspects (UNESCO World Heritage Centre, n.d.-a).

Next to these criteria, the decision-making of the World Heritage Committee also takes authenticity and/or integrity, protection and management into account. Authenticity means that the site has the ability to convey its OUV truthfully and this is expressed through indicators named as 'attributes'. These attributes need to be defined per area to assess the authenticity. They are listed in the Operational Guidelines for the Implementation of the World Heritage Convention by the UNESCO World Heritage Centre (2019) as: 'form and design, materials and substance, use and function, traditions, techniques and management systems, location and setting, language and other forms of intangible heritage, spirit and feeling and other internal and external factors'. Not all these attributes require to be established but only those that express the OUV in the most important ways. Integrity describes the completeness and intactness of a site. In order to examine this integrity it is of importance to assess the following things: a) if the area includes all elements to express the OUV b) if the site is of sufficient size to ensure the full function and processes

which convey the importance of the site; c) whether the site suffers from negative effects of development and/or neglect. The World Heritage sites should be protected and managed in such a way that the OUV, the authenticity and the integrity are sustained. The protection and management should be reviewed regularly (UNESCO World Heritage Centre, 2019).

### The Wadden Sea Area

The Wadden Sea Area is located along the coast of the Netherlands, Germany and Denmark and is nearly 11,500 square kilometres big (Common Wadden Sea Secretariat (CWSS), 2016). The Wadden Sea World Heritage site covers the 'Dutch Wadden Sea Conservation Area', the 'German Wadden Sea National Parks of Lower Saxony and Schleswig-Holstein' and the 'Danish Wadden Sea maritime conservation area'. The German part of the Wadden Sea is divided in 2 separate areas to ease the management due to the scale of the area. The Wadden sea area meets three out of ten UNESCO World Heritage criteria: geological processes (VIII), ecological processes (IX) and biodiversity (X). These official criteria can be found in *table 1* (UNESCO World Heritage Centre, 2014).

Criteria	Description
<b>VIII</b>	To be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features
<b>IX</b>	To be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals
<b>X</b>	to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation

*Table 1 The three criteria that the Wadden Sea meets (UNESCO World Heritage Centre, n.d.-c)*

The Wadden Sea area meets these three criteria as it distinguishes itself in being almost entirely a tidal flat and the islands function as a barrier system with only minor influences of rivers. This causes the coastline to deposit sediment in a very diverse way and on a very large scale. Therefore, the area has a lot of different natural processes, creating a variety of sedimentary features like salt marches, channels, flats etc. (UNESCO World Heritage Centre, 2014).

The area is also of OUV because of its integrity, protection and management. The Wadden area meets the requirements for integrity because it is one of the last remaining intertidal ecosystems on a larger scale and continues its functions relatively undisturbed and intact. The geological processes are of big influence on the biophysical processes making the productivity of the biomass high, even one of the highest in the world. The area is of great importance for over 10,000 species of plants and who are all adapted to the environmental conditions that include transitional zones between fresh and saltwater and land. The area is especially important for numerous of migratory bird species, around 30 different species and 10-12 million individual birds pass through every year (UNESCO World Heritage Centre, 2014). The concept of OUV is described more detailed in chapter 2.2.



The Wadden Sea Area includes all kinds of processes, ecosystems and habitat types as shown in figure 1. This makes the Wadden Sea very dynamic and ensures the critical ecological status to continue to exist.

In order to preserve this, the area is well managed and supervised by joint efforts (since it is one inseparable ecosystem) from the Netherlands, Germany and Denmark such as nature reserves and national parks. Most of the human influence and activities (fisheries and shipping for example) are regulated in order to protect the integrity of the area. The three countries work together in the Trilateral Wadden Sea Cooperation which is responsible for the communication between the three regions and is the provider of the overall framework for the management and conservation. Within each region, extensive protection measures are in place (UNESCO World Heritage Centre, 2014).



Figure 1 The Wadden Sea area with World Heritage property (Common Wadden Sea Secretariat (CWSS), 2016)

In order to preserve this unique area, not only the management is of great importance, but also the education of the present and future generations (also mentioned in figure 2). The International Wadden Sea School (IWSS) is a service and network platform that aims to educate people and raise awareness about the Wadden Sea area in close cooperation with UNESCO. The IWSS was established in 2003 by the Trilateral Cooperation to protect the Wadden Sea together with different nature organizations. The IWSS is coordinated by WWF Germany and the Common Wadden Sea Secretariat (CWSS). The head office is placed in Husum, Germany. IWSS brings together different educationalists from the Netherlands, Germany and Denmark to share their vision and approaches to the different visitors of the area (Common Wadden Sea Secretariat, n.d.-b).

The vision of the IWSS is that environmental education creates a sustainable willingness to protect the environment. By showing the importance of the Wadden Sea Area, the IWSS aims to create a love for the area and the eagerness to care for this World Heritage. They are focused on saving the all-around significant resources to be able to be admired and still be there in the future. All education and interpretation activities bolster the protection of the Wadden Sea as an ecological and biological entity (Common Wadden Sea Secretariat, n.d.-c).

The education in the Wadden Sea area has already been evolved over the past decades with more communication between the three countries and with the aid of the internet. In 2018 the “Wadden Sea World Heritage Site Education and Interpretation Strategy” was signed to provide a framework for education in the Wadden Sea WHS (Common Wadden Sea Secretariat, 2018). This strategy was developed as a part of the work of the IWSS. In this strategy there are several education methods presented, from formal learning in schools and other learning groups to non-formal learning in visitor centres, nature guide associations and tourist organizations.

There is also informal learning, where the main audience is the general public. In the whole area there are about 60 different information facilities for visitors (Appendix I). They vary from big centres to smaller information points. The target groups vary from school visits to different stakeholders, tourists and the general public. The visitor centre Schutzstation Wattenmeer for instance, gives excursions for schoolchildren and seminars for groups and schools. Next to flyers and other practical tools, such as games for children and educational posters, they use excursions to educate people on the importance of the Wadden Sea area (Schutzstation Wattenmeer, 2019).

The Netherlands, Denmark and Germany have been cooperating in the Trilateral Wadden Sea Cooperation since 1978 to protect the Wadden Sea area. The Common Wadden Sea Secretariat (CWSS) facilitates, supports and coordinates the TWSC. Together they constitute the Network Group Education. As shown in figure 2, education is just a small part of the Organisational framework of the Wadden Sea World Heritage.

## Wadden Sea World Heritage Interpretation Organisational Framework

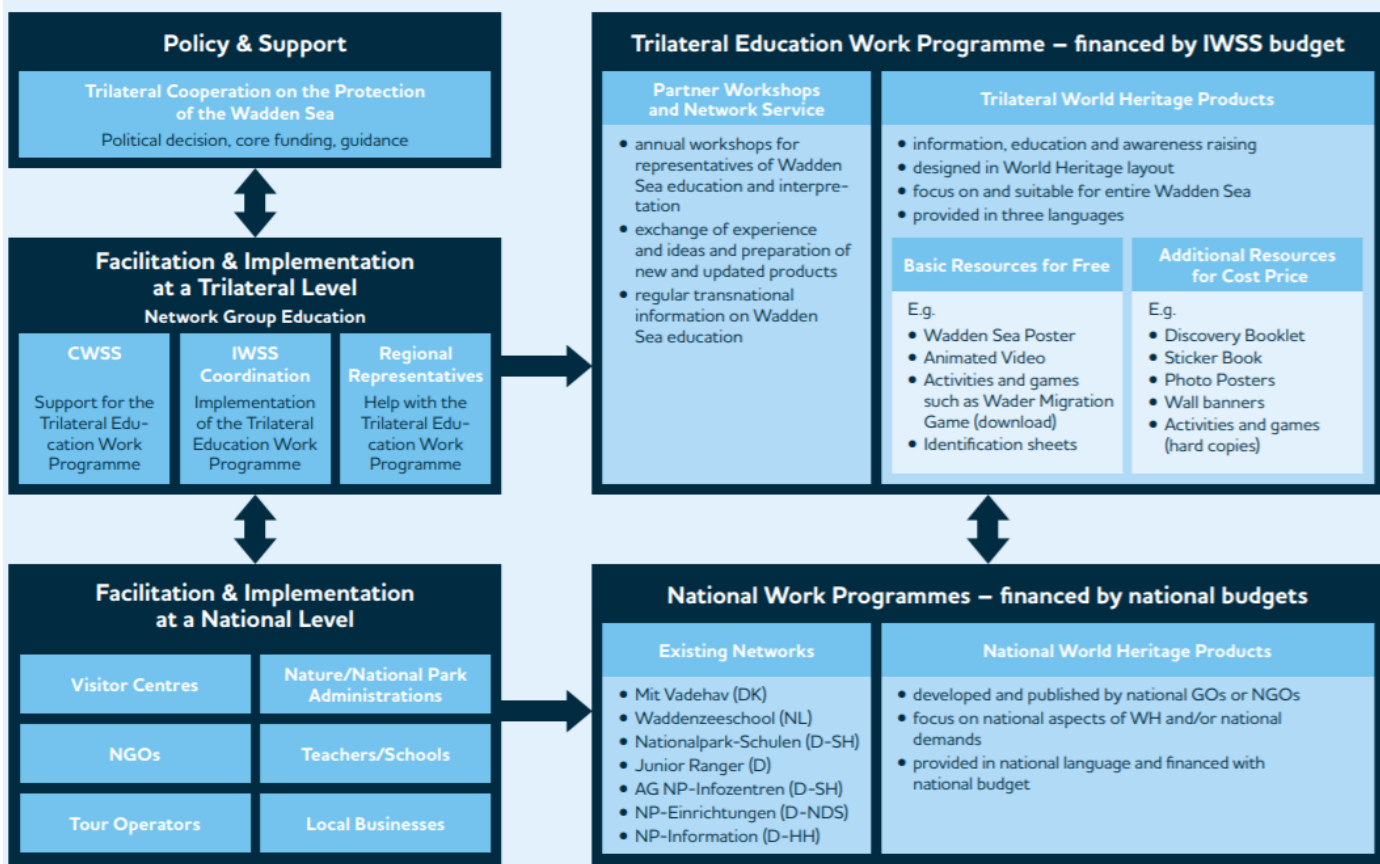


Figure 2 Organizational Framework (Common Wadden Sea Secretariat, 2018)

This is a shared responsibility on a national and trilateral level. The implementation on national level goes through the National Work Programs by private and public partners. The implementation of the education on a trilateral level is a task of the Trilateral Wadden Sea Cooperation.

The program of this cooperation builds on already existing education structures of the IWSS (Common Wadden Sea Secretariat, 2018). The International Wadden Sea School (IWSS) has developed, together with the information centres, a wide range of information and educational products, covering the entire Wadden Sea Area as one ecological nature reserve. Since several years regional networks of information centres, national parks and schools such as the Waddenzeeschool in the Netherlands, the "Junior Ranger Program" in Germany and "My Wadden Sea" in Denmark have existed. In addition to providing information and guided tours, there is an increasing interest from local entrepreneurs to offer visitors something distinctive: tours that show the unique character of the Wadden Sea World Heritage and draw more attention to it (UNESCO, 2014).

Looking at the previous paragraphs, it becomes clear what the importance is of the Wadden Sea World Heritage and education thereof. A lot has been done with education within the three countries by means of museums, visitor centres, exhibitions, mudflat tours etc.

Based on meetings with Anja Szczesinski, who is a coordinator of the IWSS, it can be concluded that since the Wadden Sea area got the World Heritage status, a key challenge has been to link the concept of OUV in a consistent way to information and educational activities provided by educationalists in visitor centres and institutes (personal communication, 18 November 2019). This mostly means that the visitors who visit the area, should get a clear understanding of what the OUV mean and what its value is. It is not clear if this is indeed the case. It is a possibility that throughout the Wadden Sea area there are different ways on how the concept of the OUV of the World Heritage is being translated by the visitor centres. What works in one centre might not work in other centres, the same goes for the different regions (the Netherlands, Germany and Denmark). All the centres should give out a uniform message but adapted for different regions in such a way that it understandable and applicable per region. Successful means of communication helps to increase the understanding of conservation and will help to encourage the visitors to protect the area. So far, it is not clear to the IWSS what the individual visitor centres communicate -their message- and how they do this -what ways and tools they use-.

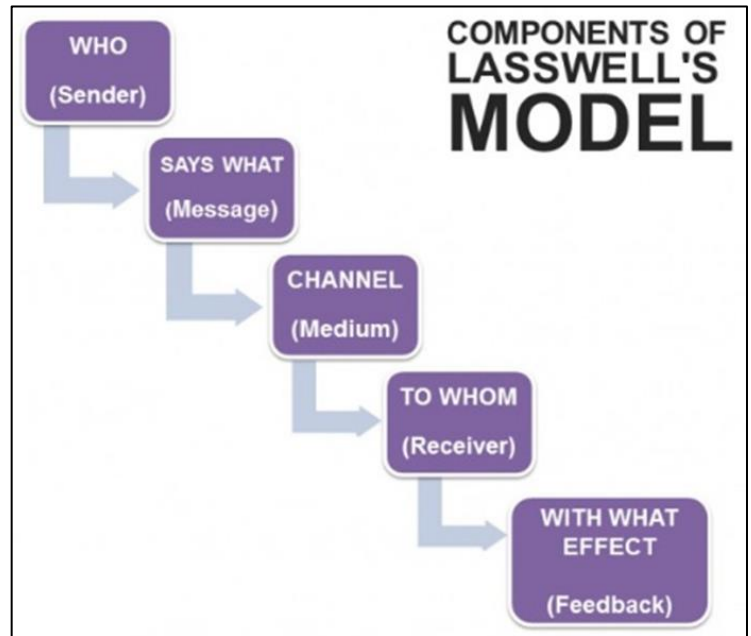
As shown in Lasswell's model in *figure 3*, there are five components that can be used to analyse communication processes, among which that of the OUV. The IWSS would like to have an overview on what the visitor centres communicate about the OUV (*box 1* and *2* in Lasswell's model) and how they communicate this (*box 3*). For this it is important to know how the educationalists define the concept of the OUV and what tools they use to communicate this (*box 3*). Conveying this concept correctly to the different target groups (*box 4*) and adapted to the local situation is one of the main priorities for the IWSS and its centres.

The target audiences included are stakeholders (non-formal learning) and the general public (informal learning) (*box 4*). The main audience for "non-formal learning" are multipliers of Wadden Sea World Heritage Site education such as: visitor centre

networks, NGOs, nature guide associations, tourist organisations, and children and youth groups engaged in extracurricular learning activities. The audience for "informal learning" consists of the general public, like local inhabitants and guests. Both of these audiences include all ages.

The IWSS would also like to see so-called 'good stories' from the educationalists in the different centres (*box 5*). 'Good stories' are examples of a successful way of conveying the message of the OUV. When there is an overview available, visitor centres can let themselves get inspired by each other's ways of conveying the concept of the OUV (A. Szczesinski, personal communication, 18 November 2019).

The overview will be used by the IWSS in order to see if there is a need for improvement and to provide an advice for the IWSS coordination on how to best compile and deliver information on the World Heritage to make it most useful for the regions.



*Figure 3 The five components of Lasswell's model to evaluate communication processes (Bajracharya, 2018)*

## 1.1 Problem statement

There is no clear view on what and how the visitor centres communicate the Outstanding Universal Value of the Wadden Sea World Heritage to the target groups. Moreover, the IWSS wants to know if there are currently 'good stories' that present the Outstanding Universal Value of the Wadden sea in a correct way.

## 1.2 Aim

The aim is to provide the IWSS with an overview on what and how visitor centres communicate about the Outstanding Universal Value of the Wadden Sea World Heritage in the visitor centres. In addition, this research will provide 'good stories' for the IWSS. The IWSS will share the results with the Network Group Education and decide whether improvements can be made concerning the communication about the OUV.

## 1.3 Research questions

### **Main question**

What and how do the different visitor centres communicate about the Outstanding Universal Value of the Wadden Sea World Heritage to their different target groups and which 'good stories' exist that communicates this value?

### ***Sub questions***

- What is being communicated about the OUV in the different visitor centres right now?
- How is the concept of the OUV being communicated?
- Which 'good stories' are present that communicate the OUV?

## 1.4 Reading guide

In chapter 2, the methods used in the study are presented including the research area, operationalisation, the data collection and the data analysis. In chapter 3 the results per sub-question are highlighted and chapter 4 discusses the validity of the study and provides recommendations for follow-up studies. Chapter 5 presents the conclusion, in which the main question is answered.

## 2 Methods

The following chapter describes how the data was collected and analysed in order to answer the research questions presented in the introduction. First the research area, the operationalisation and the research process will be described. After this more in-depth information about the data collection per sub question will follow. Finally, the data analysis will be presented.

### 2.1 Research area

This research is focused on education in the whole Wadden Sea Area with emphasis on the visitor centres. As shown in *figure 4*, there are 60 visitor centres spread around in the area. They are all connected to the framework of the IWSS. These centres can vary from small information points (that sometimes only use folders of the IWSS) to big educational centres. In addition to exhibitions and information materials, almost all visitor centres offer educational activities about the nature and culture of the Wadden Sea. From adventurous excursions and lectures to workshops and holiday camps. The target groups, such as student, groups and families, will find suitable activities for everyone here. There are 10 centres in the Netherlands, 37 in Germany and 13 in Denmark. A distinction is made between the two regions in Germany: Schleswig-Holstein and Lower Saxony Hamburg/Neuwerk (Appendix I). They play a crucial role in presenting the importance of the Wadden Sea Area to the different target groups (Common Wadden Sea Secretariat, 2018) (Visit Wadden, 2020).



Figure 4 Visitor centres the World Heritage property (Common Wadden Sea Secretariat, 2018).

### 2.2 Operationalisation and research process

Since the main goal of this research is firstly to provide an overview on what is being communicated about the OUV in the visitor centres, qualitative, descriptive research will be used as research design. It is of importance to present this overview in a systematic way so it will be understandable for the IWSS (Kumar, 2011). Secondly it is of importance to know how the information about the OUV is being communicated. And finally, it should be clear when communicating a story about the OUV becomes a good story that other centres could find inspiring.

In order to answer the research question is it of importance to first make the concept of 'Outstanding Universal Value' more specific and to define a 'good story' with set criteria.



The Wadden sea is of OUV because the area meets three out of ten UNESCO World Heritage criteria: geological processes (VIII), ecological processes (IX) and biodiversity (X) (*figure 5*). Therefore, in the communication of the OUV these criteria should come forward. The criteria are the following (Common Wadden Sea Secretariat, n.d.-a):



*Figure 5 The three aspects that are concluded in the Outstanding Universal Value (Common Wadden Sea Secretariat, n.d.-a)*

#### **Geological processes (VIII)**

1. Largest unbroken system of intertidal sand and mud flats in the world
2. Nowhere on earth there is such a dynamic and varied coastal zone of this size
3. The coastal zone is constantly shaped and changed by wind and tides
4. These processes have formed islands, channels, mud flats, sandbanks, dunes and salts marshes

#### **Ecological processes (IX)**

1. The natural processes have been largely undisturbed in the entire Wadden Sea Area for millennia
2. The geological and geomorphic features are closely connected with the biophysical processes
3. These features help the area to be dynamic to global changes
4. There is a multiple transitional zone between land, sea and freshwater and this is the basis for the species richness of the area

#### **Biodiversity (X)**

1. The Wadden Sea area is one of the largest wilderness areas in Europe and one of the most important hotspots of biodiversity in the world
2. The area hosts around 10.000 species of plants and animals
3. The importance of the area goes beyond the borders, it is crucial for around 12 million migratory birds that make a stopover

Aside from these three criteria, the Wadden Sea Area also meets the three aspects of the OUV, as seen in *figure 5*. All the World Heritage sites must oblige to these three aspects so not only the criteria but also the authenticity and/or integrity and the protection and management (Common Wadden Sea Secretariat, n.d.-a).

### **Integrity**

1. The Wadden Sea World Heritage Site consists of all aspects (species, habitats, processes) that form a natural and dynamic Wadden Sea
2. The area is big enough to maintain all the critical ecological processes and to ensure the full function and processes which convey the importance of the site

### **Protection and management**

1. The effective conservation state of the Wadden Sea area is the result of joint nature protection efforts in the last four decades
2. The Trilateral Wadden Sea Cooperation provides the overall framework for the management and the conservation of the area and provides coordination between the three state parties: the Netherlands, Germany and Denmark

### **Good stories**

There are a couple of criteria that indicate when a story about the OUV is seen as a 'good story' which will be tested with the use of the survey. The so called 'good story' transfers the OUV in an understandable way to the visitors in a manner that they can reproduce the message of the OUV and contains the components from the criteria above. A certain story can be labelled as a good story if:

- The story covers at least one bullet point per set criteria.
- The story covers at least two of the components from these criteria and is therefore transferred in a way that suits the audience (Jarvis, 2020)
  1. The story is easy to understand, and the language matches the audiences (children, adults etc.)
  2. The story has an emotional component (humour, pain, joy or all three)
  3. The story is real (has an element of how the story relates to the teller)
  4. The story is truthful in such a way that the teller believes in what they are narrating
  5. The story is valid regardless of the size of the audience or the type of audience

These criteria are based on meetings with Anja Szczesinski.

## 2.3 Data collection

The theoretical background and the general (social) context for the introduction of this research was gathered with the use of a desk study and through personal communication with the problem owner of the IWSS; Anja Szczesinski. The collection of the information that was needed to answer the research questions was done through a desk study, an online survey and more in-depth information was obtained through interviews.

### 2.3.1 Sub question one: What is being communicated about the OUV in the different centres right now?

#### **Desk study**

The first step was to expand the background information on 'how' the OUV is exactly defined (operationalisation) and information on 'what' is being communicated about the OUV was obtained through a desk study. The literature was gathered from the IWSS and what could be found online. This contains research that has been done by organisations or researchers that are closely connected to the IWSS or the Wadden Sea World Heritage. Information that is published was obtained through the website of the IWSS and UNESCO, google and google scholar with the use of suitable search terms and combinations of these terms. The information sources were restricted from 2009 up to 2020.

*Search terms: OUV, Wadden Sea World Heritage, Criteria World Heritage, Education*

#### **Online survey**

The second source of data collection was an online survey that was sent by e-mail with the use of the online program Survio. This method was chosen because the study population was relatively big and scattered over a wide geographical area (Kumar, 2011). The program Survio was used because it is free, easy to use and a lot of different types of questions could be added. The criteria described in the operationalisation were used to test if visitor centres communicate the OUV criteria and the components of storytelling as a whole or partly. With the use of these criteria the survey questions were formed. This is described in more detail in appendix II: The Blueprint of the online survey. The study population were all the 60 visitor centres in the Netherlands, Germany and Denmark (Appendix I). In the end the survey was sent to 54 centres because 6 centres had an error in their email address (10 to the Netherlands, 35 to Germany and 9 to Denmark). In order to increase the response rate, the online survey was sent by e-mail with the help of Anja Szczesinski who send the survey to the Network Group Education. By using her platform and name, the study population was more likely to respond as she is a direct link to the IWSS. The goal was that the Network education Group would distribute the survey over their contacts. Unfortunately, this did not work well enough so hereafter, the survey was sent to all the centres separately. The first respondent of the survey was at 30-03-2020 and the last one to answer was a little over a month later, on 28-04-2020.

The e-mail that was sent to the study population (Appendix II) included the following aspects:

- An introduction of the researchers and what institutes are being represented
- Background of the research and its goal
- General instructions (the time that it will cost to fill out the survey)
- What will be done with the collected data (confidential)
- If they are interested to be contacted for an interview if necessary
- A link to the online survey (using Survio)

The online survey contained both closed-ended and open-ended questions with multiple choice questions and a Likert scale (Appendix III). This scale was for example used to measure the attitude and opinions in a more nuanced way (Kumar, 2011). To analyse the data, a nominal and ordinal scale was used since all the data contained different variables like location, way of communication, wishes etc.

### 2.3.2 Sub question two: How is the concept of OUV being communicated?

#### **Desk study**

In the second sub question the focus lies on how the OUV is communicated rather than what is being communicated. This means; in what way the information about the OUV is being communicated (what tools are being used, *figure 3* in the introduction). The literature will again be gathered from IWSS and what can be found online. In the literature there was also searched for tools that the centres had on their websites such as flyers, posters etc.

*Search terms: OUV, Wadden Sea World Heritage, Criteria World Heritage, Methods*

#### **Online survey**

The online survey also included questions that were more focused on how the concept of the OUV is being communicated (Appendix II). This information was again gathered from the visitor centres. The goal was to obtain information about in what way the information is given and in what format. And if visitor centres made any use of practical formats, like flyers or information boards, or if the information was transferred verbally.

### 2.3.3 Sub question three: Which 'good stories' are present that communicate the OUV?

#### **Interviews**

Based on the outcome of the online survey, semi-structured interviews were held with selected educationalists to get more in-depth information. The interviews were semi-structured because the questions were formed beforehand but there was also room for additional questions and explanation (see appendix IV for the interview blueprint). The selection was based on who had replied to the survey and whether their centre had a good story (see data analysis for the steps that were taken to determine this). In total 22 centres replied to the survey and eleven centres were selected for an interview of which six centres replied to the invitation. The interviews were supposed to be held during the IWSS workshop in Esbjerg, Denmark, but due to the corona crisis this workshop was cancelled. The interviews were held using Zoom or similar programs and recorded (after asking for permission) with a mobile phone. The planning of the interviews was based on the availability of the visitor centre. The interviews contained more in-depth questions about what and how the selected centres communicate about the OUV, what tools they use and if they had examples of methods to support their statements.

## 2.4 Data Analysis

### Desk study

The literature that was found online and with the help of Anja Szczesinski, was designated as useful if it had enough relevance to the subject. In this case it was of relevance if it contained information about the Wadden Sea World Heritage in a more general way and more specific on what and how the visitor centres communicate about the OUV. After identifying if the literature was useful it was read critically and the themes that were useful for this study were selected. Most of the websites were in the native language of one of the three countries. This was solved by translating the information. The literature could contain two types of information: universal and more specific information. This information was written down by starting with the more general information after which it was narrowed down to the specifics (Kumar, 2011).

### Online survey

After receiving response of the online survey, the data was processed to ensure that the data was complete and consistent (Kumar, 2011). The data was analysed with the use of *table 2*. Every centre that filled in the survey has its own table. The first column describes if the centre communicates about the different aspects of the OUV and what components of storytelling they used. The second column describes how this is being communicated and what tools are being used. After this it was concluded if this was sufficient to be defined as a 'good story'. As stated, before in the operationalisation, it is a good story if it covers at least one bullet point per OUV criterion and if it covers at least two components from the storytelling criteria. The tables that have good stories were marked yellow and the tables that did not were marked blue. Hereafter, all the information about the centres that had good stories were merged in one table to make it more clear and easier to find information.

*Table 2 The table that was used in order to analyse that data from the online survey*

Nr. Name Centre:		Email:		
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)				
Ecological processes (IX)				
Biodiversity (X)				
Integrity				
Protection and management				
Components of storytelling				

## Interviews

After the telephone interviews, the first step in analysing these was transcribing the spoken words with the use of the audio recordings that were made during the interviews. The style choice for the transcribing was 'Content Only Transcription' in which anything irrelevant to the content was ignored, indicated in the transcription with [...]. The content of the answers was the main priority rather than small talk.

Hereafter, the interview was analysed by performing a coding analysis using deductive coding which means that every interview question contained a certain theme (Appendix V: interview guide): *Communication, Message, Effect, Feedback, Understanding, Tools, Methods, Change and Improvement*. Every theme got a certain colour and if the answer that the interviewee from a certain centre gave connected with the theme, the answer was highlighted in the same colour (Kumar, 2011). The themes and highlighted answers were merged per centre in a table with the use of excel (Appendix VII: Results of the interviews). After this the most important information per centre was written down in chapter 3.4. This was done by connecting the information that the interviewees gave to the results of the online survey. For example, if the centre answered that they communicated a certain OUV criterion, the information from the interviews was used to explain what and how they communicate about the criteria. After combining all these findings with the information that was found in the literature (tool examples such as flyers, posters etc.), the good story was complete.

The order of showing the results was determined with the use of the research questions. First the results that focused on what is being communicated were globally described, secondly the results on how these things were communicated were shown and finally an overview of the good stories was presented. After this, the good stories in the table were supported by the results of the in-depth interviews. Based on these results the final conclusions were drawn with a combination of the literature research, the survey results and the interview results.



### 3 Results

First, the results from the demographics from the online survey will be shown. Second the results per sub question will be shown. The first two sub chapters will globally describe what and how the OUV is communicated among the centres and the final sub chapter will contain more detailed information about the centres that had good stories.

#### 3.1 Demographics

The survey was sent to 54 centres (10 to the Netherlands, 35 to Germany and 9 to Denmark) and in the end 22 centres filled it in. In total the survey was filled in by six centres from the Netherlands, eight centres from Schleswig-Holstein, seven centres from Lower Saxony and Hamburg/Neuwerk and one centre from Demark (figure 6).

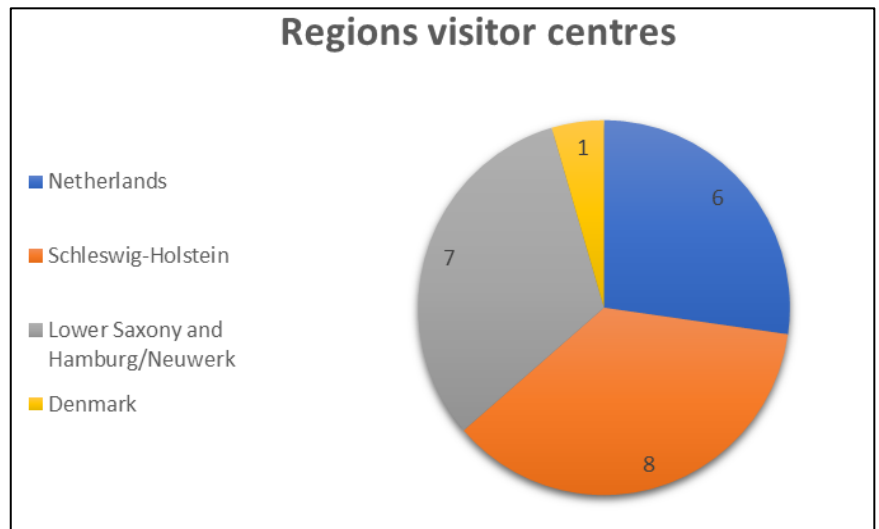


Figure 6 Respondents' region of origin

The centres welcomed different kind of visitors such as school children, businesses and tourists (figure 7). The centre could select more than one answer. 21 centres answered school children, 10 centres business, 21 centres tourists and thirteen centres choose the category 'other'. The most common answer in the category 'other' was local inhabitants and students from all ages.

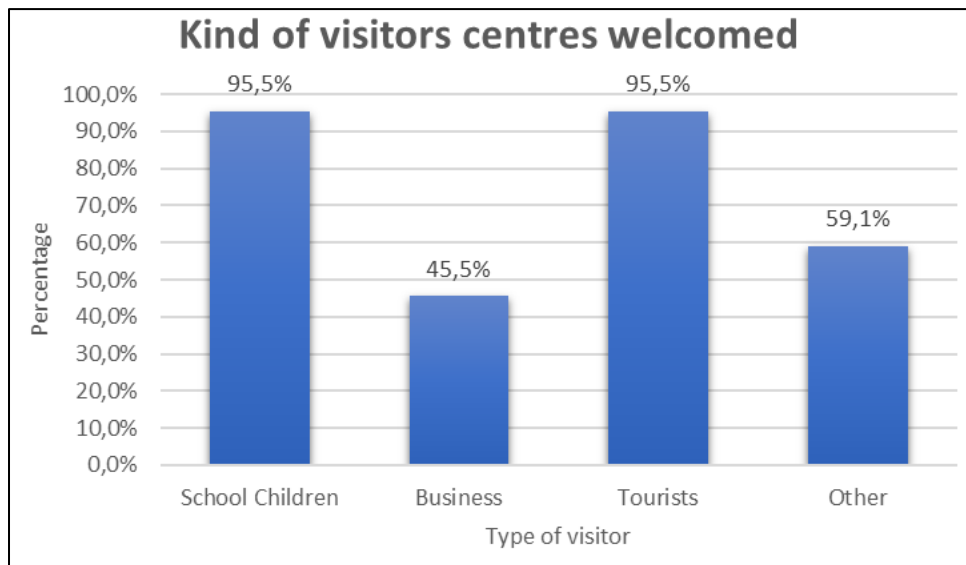
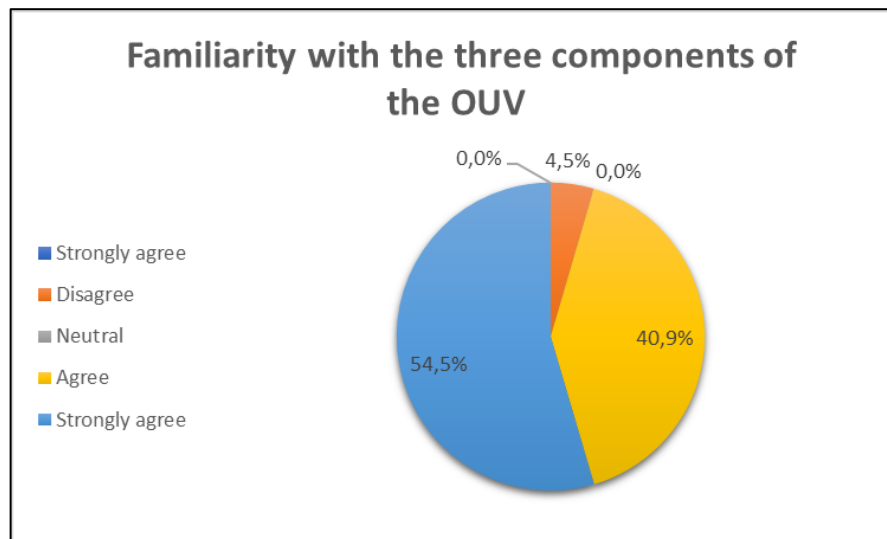


Figure 7 Distribution of kind of visitors welcomed in the centre; one centre welcomes more than one kind of visitor, therefore total result is more than 100%.

From the 22 centres, 21 centres agreed that they were familiar with the three components of the OUV. However, the level of agreement differs: 12 centres strongly agreed, 9 centres agreed, one centre disagreed and none of the centres were neutral or strongly disagreed (*figure 8*).



*Figure 8 Familiarity the centres have with the three components of the OUV.*

### 3.2 What is being communicated about the OUV in the different visitor centres right now?

There was not much literature found on what is being communicated by the different visitor centres. Recent reports focus more on how the visitors value the Wadden Sea and why they visit the islands themselves (Folmer, Revier, & Cupido, 2016). The report 'Sustainable Tourism in the Wadden Sea World Heritage Destination' from UNESCO (2014), focusses on the management of sustainable tourism. It states that nature conservation and recreation coexist well in the Wadden Sea Area so far but does not give information on what is being communicated about the OUV and how. The European Tourism Futures Institute (2017) did research on which providers are active that offer excursions and/or experience activities in the Dutch Wadden Sea area, what kind of activities they offer and how the visitors feel about the activities. They also focussed on if activities contributed on the knowledge of the Wadden Sea Area and if they were made aware of the uniqueness and the vulnerability of the area in which around 70% of the respondents indicated that they were made aware. What was said during these activities was not mentioned and the focus lies more on how the visitors felt about the activities and if their perspective on the area changed after participating in certain activities.

21 out of the 22 centres that filled in the survey indicated that they communicate one or more parts about OUV criterion one: **Geological processes (VIII)**. 18 of the 22 centres indicated that they communicate one or more parts about the criterion: **Ecological processes (IX)**. 18 of the 22 centres also indicated that they communicate one or more parts about the criterion: **Biodiversity (X)**. 16 of the 22 centres indicated that they communicate one or more parts about the criterion: **Integrity**. And finally, 19 of the 22 centres indicated that they communicate one or more parts about the OUV criterion: **Protection and management**. More in-depth information on how the centres communicate about the OUV can be found in chapter 3.3 and the information that was provided by the centres that were interviewed and the good stories can be found in chapter 3.4.

Each criteria of the Wadden Sea World Heritage showed differences in how it was being communicated towards the different visitors.

### 3.2.1 Geological processes

95% of the 22 centres communicated in one way or another about the geological processes that made the Wadden Sea an UNESCO World Heritage site. As shown in figure 9 the geological processes criterion was well represented; only one of the respondents did not communicate at all specifically about the geological processes. The centres communicate the most about the first point of the geological processes.

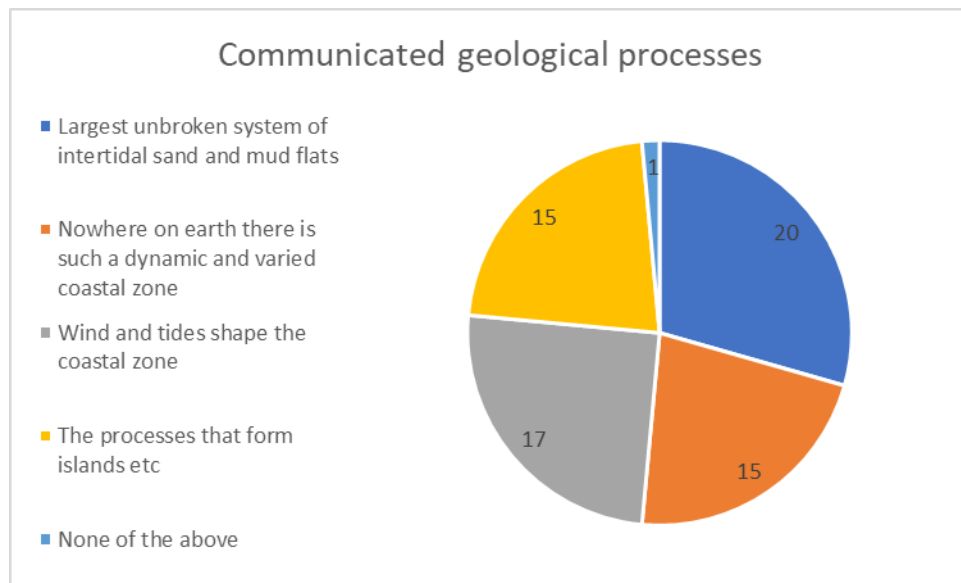


Figure 9 Communication about the aspects of geological processes

### 3.2.2 Ecological processes

81,2% of the centres surveyed communicate in one way or another about the ecological processes of the Wadden Sea Area. Four centres did not communicate about the ecological processes in any form or way (figure 10). The centres communicate the most about the fourth point of the ecological processes.

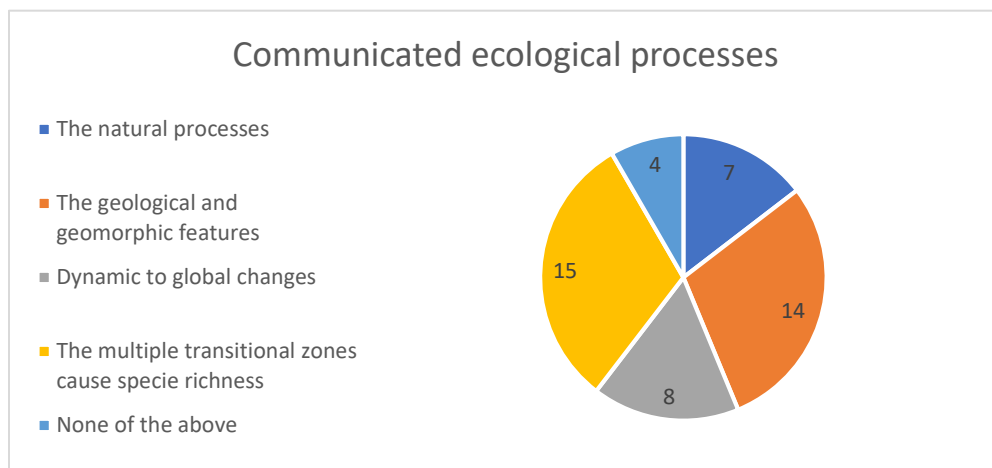


Figure 10 Communication about the aspects of ecological processes

### 3.2.3 Biodiversity

As shown in figure 11, all the respondents communicated about the importance of the biodiversity of the Wadden Sea Area.

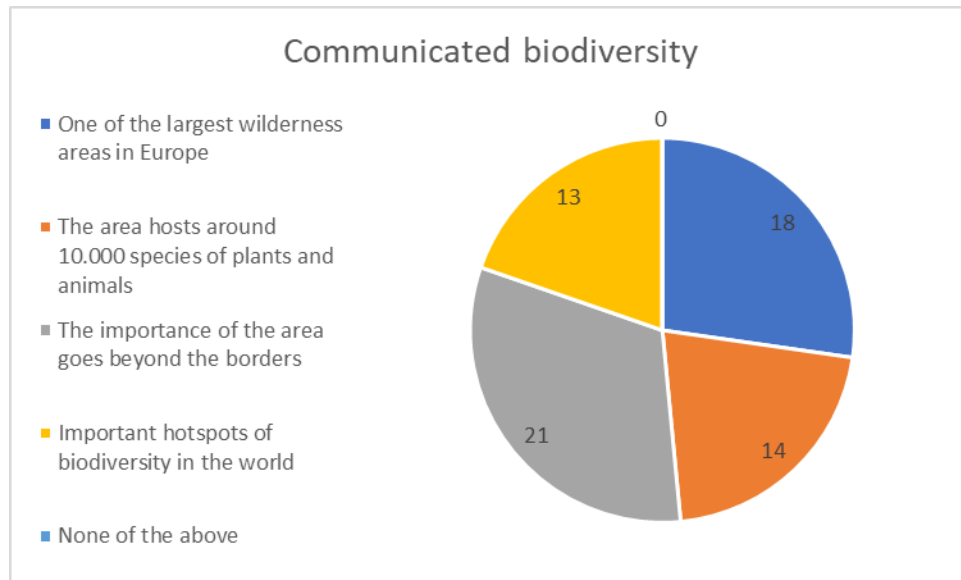


Figure 11 Communication about the aspects of biodiversity

### 3.2.4 Integrity

Another important aspect of the OUV is the integrity. In the survey, integrity was divided into two parts:

- “The Wadden Sea World Heritage Site consists of all aspects (species, habitats, processes) that form a natural and dynamic Wadden Sea.”
- “The area is big enough to maintain all the critical ecological processes and to ensure the full function and processes which convey the importance of the site.”

The first aspect of integrity is communicated by fifteen of the respondents, the second one by seven of the respondents and six respondents indicated that they did not communicate about the integrity of the Wadden Sea World Heritage Area at all.

### 3.2.5 Protection and management

The last aspect of the OUV is the protection and management aspect of a World Heritage site. Just as the integrity (3.2.4), this component is divided in two parts:

- “The effective conservation state of the Wadden Sea area is the result of joint nature protection efforts.”
- “The Trilateral Wadden Sea Cooperation provides the overall framework for the management and the conservation of the area and provides coordination between the three countries: the Netherlands, Germany and Denmark.”

The first aspect of protection and management is communicated by 12 of the respondents, the second by 14 of the respondents and three centres indicated that they did not communicate this to their visitors at all.

### 3.3 How is the concept of the OUV being communicated?

After the centres filled in if they communicate a certain criteria, they could also fill in how they communicate this per criteria. Centres use most of the time multiple tools to communicate one of the criteria. Most of the centres (20 centres) use tours to communicate the criteria geological processes and around half of the respondents make use of film material and/or flyers or posters. A third of the respondents also use other media like their website, school programs or an exhibition in their museum or centre.

Most of the centres use tours (eighteen centres) and presentations (fourteen centres) to communicate about the ecological processes. Less than half of the respondents communicates about the ecological processes via film material and a few of the centres communicates these processes via a flyer or poster. Other examples of mediums that are used are the website, a seminar, exhibitions and in one case: the island newspaper.

Most of the centres use tours (seventeen centres) to communicate about the biological processes. A big part of the centres also make use of a presentation (thirteen centres) and around half of the centres that filled in the survey use film material and/or flyers or posters. A third made use of other media like social media, an exhibition or an animal feeding show.

All the centres who talk about the integrity do so during tours (fifteen centres). The rest of the respondents mainly communicated about the integrity by means of a presentation. Half of the centres indicated they made use of film material and/or flyers or posters. Other ways information about the integrity was shared were, among other things, on a website, an exhibition or seminars.

Almost all centres that communicate about the protection and management, do so during tours. Half of the centres used a presentation and a third makes use of flyers and/or posters. Very little (only three centres), used film material for this specific aspect of the OUV.

### 3.4 Which ‘good stories’ are present that communicate the OUV?

Based on the analysis of the survey results, eleven centres have good stories (*table 3*). Four from the Netherlands and seven from Germany. It is unclear if there were any good stories present in Denmark.

The first column of the table contains the name of the centre that filled in the survey. In the second column lists the criteria that were set up in the operationalisation. If there was a ‘yes’ in all these boxes it was marked as a good story. After the yes you can find which bullet points of the criteria were communicated (as listed in chapter 2.2). The rest of the columns show what tools were used to communicate the certain criteria of the OUV.

What becomes clear looking at *table 3*, is that most of the information shared, is shared during tours. All six aspects (geological processes, biodiversity, storytelling, etc) come forward during the tours. The least used medium are films. Furthermore, the centres that do make use of flyers, use them on different subjects. There is no centre that only uses poster on just one subject. The flyers/poster category is the only medium that is either used on all subjects, or not used at all.

Another medium that came forward that was not in the survey, was social media and other online platforms. Two of the centres with good stories indicated that they made use of their online platform.

Table 3: Good stories that were present and the used tools per centre

Tools for communicating the OUV of the Wadden Sea World Heritage								
Centre	OUV criteria	Communicate?	Orally	During tours	Presentation	Film	Flyer/Poster	Other
Ecomare	<i>Geological processes</i>	Yes (all)	X	X	X	X	X	Interactive exhibitions
	<i>Ecological processes</i>	Yes (2,3,4)	X	X	X	X	X	Interactive exhibitions
	<i>Biodiversity</i>	Yes (all)	X	X	X	X	X	Interactive exhibitions
	<i>Integrity</i>	Yes (1)	X	X	X	X	X	Interactive exhibitions
	<i>Protection and Management</i>	Yes (all)	X	X	X		X	Interactive exhibitions
	<i>Storytelling</i>	Yes (1,3)						
Nationalpark- haus Neuwerk	<i>Geological processes</i>	Yes (all)	X	X	X	X	X	
	<i>Ecological processes</i>	Yes (2,4)		X	X			
	<i>Biodiversity</i>	Yes (All)	Not clear					
	<i>Integrity</i>	Yes (1)		X		X		
	<i>Protection and Management</i>	Yes (2)	X	X				
	<i>Storytelling</i>	Yes (all)						
Wadden Vereniging	<i>Geological processes</i>	Yes (1,2,4)	X	X	X		X	
	<i>Ecological processes</i>	Yes (1,2)	X	X	X		X	
	<i>Biodiversity</i>	Yes (2,3)		X	X		X	
	<i>Integrity</i>	Yes (1)	X	X	X		X	
	<i>Protection and Management</i>	Yes (1)	X	X	X		X	
	<i>Storytelling</i>	Yes (1,2,3,4)						



Centre	OUV criteria	Communi- cate?	Orall y	During tours	Presen- tation	Film	Flyer/ Poster	Other
<b>Natuurcentrum Ameland</b>	<i>Geological processes</i>	Yes (all)	X	X	X	X		Permanent exhibition
	<i>Ecological processes</i>	Yes (all)	X	X	X	X		Permanent exhibition
	<i>Biodiversity</i>	Yes (1,3)	X	X	X	X		Permanent exhibition
	<i>Integrity</i>	Yes (all)	X	X	X	X		Permanent exhibition
	<i>Protection and Management</i>	Yes (all)	X	X	X	X		Permanent exhibition
	<i>Storytelling</i>	Yes (1,2,3,4)						
<b>Bezoekers centrum Nationaal Park Schiermonnik- oog</b>	<i>Geological processes</i>	Yes (2,3,4)	X	X	X	X		Website, social media, local newspaper
	<i>Ecological processes</i>	Yes (2,4)	X	X	X	X		Website, social media, local newspaper
	<i>Biodiversity</i>	Yes (1,3,4)	X	X	X	X		Website, social media, local newspaper
	<i>Integrity</i>	Yes (1)	X	X	X	X		Website, social media, local newspaper
	<i>Protection and Management</i>	Yes (2)	X	X				
	<i>Storytelling</i>	Yes (1,2,3,4)						
<b>Nationalpark- Haus Dornumersiel</b>	<i>Geological processes</i>	Yes (1,2,3)	X	X	X	X	X	Seminar, training, website
	<i>Ecological processes</i>	Yes (2,3,4)	X	X	X	X	X	Seminar, training, website
	<i>Biodiversity</i>	Yes (all)	X	X	X	X	X	Seminar, training, website
	<i>Integrity</i>	Yes (1)	X	X	X	X	X	Seminar, training, website
	<i>Protection and Management</i>	Yes (all)	X	X	X	X	X	Seminar, training, website
	<i>Storytelling</i>	Yes (all)						
<b>UNESCO World Heritage Visitors Centre Wilhelmshaven</b>	<i>Geological processes</i>	Yes (all)	X		X	X		
	<i>Ecological processes</i>	Yes (all)	X	X	X	X		
	<i>Biodiversity</i>	Yes (all)	X	X	X	X		
	<i>Integrity</i>	Yes (all)	X	X	X	X		
	<i>Protection and Management</i>	Yes (all)	X	X	X	X		
	<i>Storytelling</i>	Yes (1,2,4,5)						
<b>Nationalpark- Haus Wangerooze</b>	<i>Geological processes</i>	Yes (all)	X	X	X	X	X	
	<i>Ecological processes</i>	Yes (3,4)	X	X				
	<i>Biodiversity</i>	Yes (1,2,3)	X	X		X	X	
	<i>Integrity</i>	Yes (1)	X	X			X	
	<i>Protection and Management</i>	Yes (all)	X	X			X	
	<i>Storytelling</i>	Yes (all)						

Centre	OUV criteria	Communi- cate?	Orall y	During tours	Presen- tation	Film	Flyer/ Poster	Other
<b>Schutzstation Wattenmeer Nationalpark- Seminarhaus Hallige Hooge</b>	<i>Geological processes</i>	Yes (all)	X	X	X			
	<i>Ecological processes</i>	Yes (all)	X	X	X			
	<i>Biodiversity</i>	Yes (all)	X	X	X			
	<i>Integrity</i>	Yes (all)	X	X	X			
	<i>Protection and Management</i>	Yes (all)	X	X	X			
	<i>Storytelling</i>	Yes (all)						
<b>Erlebniszentrum Naturgewalten</b>	<i>Geological processes</i>	Yes (1,3,4)		X	X	X	X	
	<i>Ecological processes</i>	Yes (2,4)		X	X	X		
	<i>Biodiversity</i>	Yes (all)	X	X	X	X	X	
	<i>Integrity</i>	Yes (all)		X	X	X	X	
	<i>Protection and Management</i>	Yes (2)		X	X			
	<i>Storytelling</i>	Yes (all)						
<b>Nationalpark- Haus Juist</b>	<i>Geological processes</i>	Yes (1,3,4)		X	X		X	
	<i>Ecological processes</i>	Yes (2,3,4)		X	X		X	Social media
	<i>Biodiversity</i>	Yes (all)		X	X		X	
	<i>Integrity</i>	Yes (all)		X	X		X	
	<i>Protection and Management</i>	Yes (1)		X	X		X	
	<i>Storytelling</i>	Yes (4,5)						

### 3.4.1 Overview of the good stories per centre

The centres that were chosen to be interviewed, all were listed as communicating a story that conveyed the OUV criteria in one way or another and used the components of storytelling (further referred to as a good story). Out of the eleven centres with good stories, only six responded to the invitation to be interviewed. In the following paragraphs the results from the six interviews will be linked to their survey answers.

#### UNESCO World Heritage Visitors Centre Wilhelmshaven

The main message of this visitor centre is to bring the fascination for the Wadden Sea across. They believe that the visitors learn why the Wadden Sea is a World Heritage after leaving. In order to communicate the message, the centre does not use a lot of tools during the mudflat tours. To convey this they, among other things, speak about the bigger picture of the Wadden Sea.

As shown in table 3, all of the bullet points that belong to the three UNESCO criteria (geological, ecological and biodiversity processes), are being communicated by Wilhelmshaven. They also communicate all of the important aspects of the integrity and management aspects of the Wadden Sea World Heritage. They do this by means of the following storytelling aspects: the story is easy to understand and the languages

matches the audience, it has an emotional component, is truthful and the story always has the same message and effect.

The information about the OUV is woven through different stories. They mostly talk about the extremities and dynamics in the Wadden Sea like the tides and how difficult this is for the species that live here. That the water and other circumstances are always changing. During this story they use examples of their surroundings to bolster their explanation. This story links the geological criteria nr. 2 and 3 with the biodiversity criteria nr. 1 and it makes use of two components of storytelling.

On their website they also give information on different birds that forage in the Wadden Sea. A visitor of the site can click on a bird and get information about the migration pattern and other information about that specific specie.

*Highlights Good Story: linking the surroundings to World Heritage criteria, linking different criteria with each other.*

### **Bezoekers centrum Nationaal Park Schiermonnikoog**

The main message, communicated by the whole staff, of this centre is that the Wadden Sea Area is beautiful and special and they want to make people enthusiastic about it. And they have the underlying hope that people will be more careful with it and that it will be preserved in this way. They zoom in on certain things that are normally easily overlooked. They do not literally mention the Wadden Sea World Heritage name very often, but of course the underlying message is also their message. In this way the centres communicates the three UNESCO criteria (geological: 3 points, ecological: 2 points and biodiversity processes: 3 points). The message is shared in different stories and they use different tools. The method that works best is letting people do things themselves rather than only telling them about it and the main goal is always that the visitors have a fun time. One of the things that always works well is, for example, that people dig up the cockles themselves. That they really dig things up themselves and then see how quickly you have your hands full with clams and so how many there are on the whole mudflats and therefore communicate about the biodiversity. They communicate one of the integrity criteria and also one of the protection and management aspects.

They try to make their story personal by means of the following storytelling aspects: the story is easy to understand, and the language matches the audiences (children, adults etc.), the story has an emotional component (humour, pain, joy or all three), the story is real (has an element of how the story relates to the teller) and the story is truthful in such a way that the teller believes in what they are hearing. They try to tell the audience about their own experiences in the Wadden Sea Area and why they like about it.

The tools that they use the most are their website and social media, the local newspaper and things from the Waddenzee school such as maps of the Wadden Sea. On their social media and website they mostly share fun facts that the people who visit their social media can quickly read. On their website they also have an interactive map where different geological processes are visible and what the best places are to spot birds. If school groups arrive they refer to materials from the IWSS with the booking confirmation so the teachers can use these materials to teach the children some things about the Wadden Sea before their trip starts.

*Highlights Good Story: interactive way of telling information, make people enthusiastic and 'secretly' teach them about the Wadden Sea Area.*

## **Wadden Vereniging**

The Wadden Vereniging does not have a visitor centre like the other centres do, but they do communicate the aspects of the OUV to their visitors online and on mudflat tours. Their main goal is to teach people the criteria whereby the Wadden Sea became World Heritage and involve the local culture in the whole story. Of the geological processes they communicate 3 of the bullet points, and of the ecological processes and biodiversity 2 points. They also intercommunicate the integrity and management part of the OUV. They communicate this from the board and also have a cluster that provides excursions. They are trained separately to transfer information about the World Heritage and OUV. The Wadden Vereniging is still looking for a clear, unambiguous story to tell about the OUV. Now there are different methods and stories used, depending on the guide himself. They especially find the more abstract things like dynamics difficult to transfer.

The Wadden Vereniging has an Instagram account whereupon they share photos and information about the Wadden Sea World Heritage. On their website they also share different stories and tips on how to take better care for nature.

*Highlight Good Story: The Wadden Vereniging itself possesses GS since they communicate the required information, but lack a unambiguous story that contains all the aspects of the OUV.*

## **Natuurcentrum Ameland**

Their approach for the Wadden is mostly the experience, fun and positive activities on the mudflats. During the excursions they talk about where the Wadden area starts and where it ends and that it has a World Heritage Status. They try to make it very clear to the people that worldwide is it a one of a kind area and link the different criteria in their story. They communicate that the area is very dynamic and always changing due to the tides and that the islands and the coast moves, and link this to for example the food chain. It makes more of an impression if you tell them something like 'if you come back here in a few hours than you will have to swim' than if you zoom in very close to all the different species. They also try to connect what the visitors see on the mudflats to why the Wadden Sea area is a World Heritage site and they compare it to other sites that also have this status. In this way they communicate almost all the criteria (geological: all the points, ecological: all the points and biodiversity processes: 2 points). Most of the communication of the OUV happens during the excursions but in the centre itself they also have an aquarium where you can find all different kind of species that are present in the Wadden Sea Area. The centre has a well-equipped practical room, where Wad practicals are organized for groups on request, but visitors can also wander around and explore. Other tools that they use are posters in order to make more abstract subjects clear.

They also communicate all of the integrity criteria and all the protection and management aspects. They make use of the following storytelling aspects: the story is easy to understand, and the language matches the audiences (children, adults etc.), the story has an emotional component (humour, pain, joy or all three), the story is real (has an element of how the story relates to the teller) and the story is truthful in such a way that the teller believes in what they are hearing. The method that works the best is making the excursions as interactive as possible and let the visitors do things themselves and ask them lots of questions because they believe that you remember things better if you find it out yourself. For example, they let the visitors fish things from a canal with a landing net.

*Highlights Good Story: interactive way of telling information and let visitors do things themselves, talk about the bigger picture.*

## **Nationalpark-Haus Dornumersiel**

This centre gives excursions as well as providing an exhibition. They talk a lot about how unique the area is and its importance for the whole world. The main message that they would like to communicate is that the Wadden Sea Area is a one of a kind and of great importance for all the animals and plants that live there. A story they tell to do so, is the story about the migration the birds make before they arrive in the Wadden Sea. In this story, they link almost all of the Biodiversity bullet points, to the integrity part of the importance of the area. Dornumersiel tells its audience that migrating birds, cannot continue their journey if they do not stop to forage in the Wadden Area. They notice that when their visitors are impressed and taken by surprise by a story, they are more likely to remember it.

The guides also link their stories to the importance the area has for them personally. Since they have a lot of different guides, most of the stories are being told differently, but all with the same message and use of storytelling. Dornumersiel also intercommunicates about how the area is being protected and why this is important.

On their website Nationalpark-Haus Dornumersiel information can be found about the national park itself, different species and the different areas of the German Wadden Sea.

*Highlights Good Story: migrating birds as example for integrity, impress and surprise the visitors for a lasting impression, tell stories from a personal point of view.*

## **Ecomare**

At Ecomare they have exhibitions that speak for themselves (with signs and sound) and they give excursions on the mudflats. So staff members work at reception and/or give excursions for visitors. Their main message is that the Wadden Sea Area is very special and that it is a priority to protect it. They communicate almost all the criteria (geological: all the points, ecological: 3 of the points and biodiversity processes: all points). And during the mudflat excursions, the WH is mentioned a lot and the migration of the birds works very well because it is easy to understand and all people usually already know some things about birds. And in this story the whole world can be involved. They also communicate one of the integrity criteria and all the protection and management aspects.

They make use of the following storytelling aspects: the story is easy to understand and the story has an emotional component (humour, pain, joy or all three). For schoolchildren for example they introduce the WH during a small lecture and with the use of a big map of the Wadden Sea Area to show them where the boundaries are. After this introduction they let the children walk free in the museum. In the new exhibition they give more information about the 3 OUV criteria than before.

The tools they use the most are exhibitions and maps and flyers from the IWSS. And sometimes when new material fits their exhibition perfectly, they use it a couple of weeks. On their website they have a lot of reading material about the Wadden sea and the flora and fauna.

*Highlights Good Story: migrating birds story and involving of the whole world, exhibitions that speak for themselves.*

### ***Good stories in retrospect***

Most of the centres do not have just one story that conveys all the criteria and OUV. They mostly use different stories to convey one, and sometimes multiple, criteria to transfer the OUV. Some criteria -like management and biodiversity in the migration story- are linked into one story because they enhance each other.

The similarities between the different good stories is that they all want to make people enthusiastic about the Wadden Sea Area. All the centres with good stories try to give the visitors a positive feeling about the Wadden Sea Area by telling different stories that everyone can relate to in their own way. Adding an emotional compound to the story is believed to better help the story get across. All of the stories convey how important the area is and that it is a priority to protect it. They try to involve the bigger picture in this story and talk about international and biological connections. One thing affects the other.

What the good stories also have in common is that the communication towards the visitors is very interactive and personal. They challenge the visitors to make their own connections. They believe that this works better than only telling the information because people will remember it better this way.



## 4 Discussion

The goal of this research was to provide the IWSS with an overview on what and how visitor centres communicate about the OUV of the Wadden Sea World Heritage. In addition, good stories were collected to possibly be used as example for other centres. The research mainly focused on what the centres communicate, how they do this, and which good stories are present. This chapter takes a critical look at the methods used and the results obtained in this research. Some centres also gave important information about improvements that should be made. This could not be linked directly to the research questions, so it is included in this chapter.

### **Interpretation of results**

The IWSS has never conducted research in what and how the centres communicate about the Outstanding Universal Value. This implies that there was only little literature regarding what is being communicated, specifically to compare the outcomes from this research with. Recent reports focus more on how the visitors value the Wadden Sea and why visitors visit the islands themselves. In the future, a link should be made between what and how there is being communicated about the OUV and how the visitors feel about this.

The results of this survey show what the different visitor centres communicate and what kind of tools they use. Eleven centres had a good story according to our criteria. However, this does not mean that these are the only good stories that are present in the whole Wadden Sea area that communicate the OUV. In the survey there was only zoomed in on the following tools: orally, mudflat tours, presentation, film and flyer/poster. However, the study of the European Tourism Futures Institute (2017) also shows that there are other tools used in the Wadden Sea Area, such as boat and fishing trips that are provided by other organizations than the visitor centres. So, it is possible that these organizations also communicate about the OUV and have a good story.

Furthermore, the centres that did not reply to the survey could also have good stories. This could have been researched by contacting all the centres individually by phone and ask them the questions directly. It can be concluded that most of the centres that filled in our questionnaire communicated about the OUV and its characteristics. Since the main question focused on the 'how' and 'what', the details about 'why is this not being communicated' have not been included in this research. The IWSS could research why certain centres do not communicate a lot about the OUV and how this can be improved.

During the interviews, more in depths information was obtained about the stories that the centres shared. However, most of the centres gave examples of messages and methods that they used (the message and the channel in Lasswell's model). When asked if they had one story that conveyed all of the information, most of the centres indicated that they did not have one standard story and that the information given also depended on the guide itself. The centres also indicated that they try to make the story personal and ask the visitors questions. But some centres did not share how they make it personal and did not give concrete examples. This could be further researched by asking the centres to write down the whole story that they communicate during an excursion rather than asking for examples.

The results from the interviews showed that the visitors know why the Wadden Sea is important but do not necessary recognize the term 'OUV' or 'World Heritage'. The centres indicated that this could be the case because the visitors are mostly looking for a fun experience and not necessarily to learn about the OUV. This was also the case in the study of Folmer, Revier, & Cupido (2016) which concluded that the

visitors usually not came to the Wadden Sea Area because it has World Heritage status but more for the islands themselves. Besides cycling and going to the beach, these reasons were not included in the study. This study also showed that almost a quarter of the respondent did not recognize the term World Heritage at all.

Only a few centres indicated that they made use of online tools such as social media and their website in the section 'other' in the survey. However, most of the centres have a website (found during the search for email addresses in order to send the survey). Filling out the survey, it could be that the centres were focussed more on the tools that they use in the centre itself rather than their website and social media. It would have been better if this was also included in the survey and the interviews because they could provide a lot of information on their website. Another difficulty was the fact that most of the websites were in Danish, Dutch and German. Some information could have gone lost in translation.

### **Limitations of research**

The survey was sent to nine centres in Denmark. The email addresses of four centres from Denmark could not be found because the websites were not in use anymore. Only one centre in Denmark responded to the online survey after we sent a reminder email. Talking to our interviewee from Ecomare, he shared that a lot of the centres in Denmark are small locations with sometimes no staff. The question of the how and what, could still be answered since it was not directly linked to a certain country in the trilateral cooperation. However, the representativeness would have been more accurate when all three countries provided data and were represented equally.

Due to COVID-19 a lot of the initial planning had to be adapted. The biggest limitation was the fact that the meeting of the IWSS was cancelled. During this meeting multiple presentations would be held by partners from the IWSS and interviews would have taken place in a face-to-face conversation. The presentations could have contained valuable information on recent developments. Having a conversation face-to-face would have been optimal for retrieving information. Furthermore, during an interview you get the chance to get to know each other before the interview begins. During an online meeting, someone stops in the middle of their workday to turn on their computer, talk about the OUV for about 45 minutes after which their day continues. Another limitation of all online interviewing is the varying sound quality. In some cases, there was an echo or hitch and the answer had to be repeated, therefore the initial response and answer of the interviewee was lost.

Besides from the COVID-19 circumstances, the interviewees knew that the answers they provided were going to be presented to the IWSS. This could also mean that some answers were not one hundred percent unbiased. For example, when asking about whether the centre had any good, practical tools, there is a great possibility that they are more likely to search for examples of IWSS tools like the bird migration poster or certain flyers.

## **Improvements in practice**

Since the interviews were semi-structured, the interviewees sometimes included valuable information in their answers as points of improvement. For example, that the planning within the centre could be better, the communication between the centres should be more efficient and that it is difficult to implement the things that are discussed in the IWSS meeting in their own centres. This is also discussed in the report Gastheerschap Waddenzee Werelderfgoed (2018) from the personal database of the Wadden Vereniging. This report also recommends that the communication and the partnership on a larger scale could be improved.

Most centres that were interviewed indicated that in the future new tools are always welcome. Especially for the smaller centres that do not have the manpower to come up with new tools themselves such as film material. They also indicated that during the excursions it is hard to bring materials to the mudflats. Small practical materials are therefore very welcome. Even though the centres communicate the underlying message of the OUV, some of the centres indicated that the term World Heritage and the OUV remains an abstract concept and that they are not entirely sure if the visitors understand these terms. The centres think this can be improved by asking for feedback or hold a survey more often.

Some centres indicated that planning of the excursions, the implementation of ideas that were discussed during the IWSS meetings and the communication between the centres is hard to implement in their own centre and make it useful for themselves and their colleagues. It could also be useful for centres to sometimes visit others and to have a look on how they do things. Another problem is that sometimes someone starts up a new initiative but when that persons leaves; nobody takes over and the imitative stops developing.

When answering the survey, 32 percent of the respondents indicated that improved communication of the OUV would be valued. The mutual request was a need for telling the same story. A lot of centres indicated this individually during the interview. This would mean that the guides tell somewhat the same information and the story gets more consistent. This could also be helpful with telling things that proved more difficult to tell, such as pollution and legislation. The centres think this can be achieved by more communication between the centres and by having regular trainings. The IWSS could integrate these into their annual planning. Based on this research, the IWSS will investigate the possibilities of having one analogous story conveying the OUV.

## 5 Conclusion and Recommendations

This research aimed to answer the following research question: "What and how do the different visitor centres communicate about the Outstanding Universal Value of the Wadden Sea World Heritage to their different target groups and which 'good stories' exist that communicates this Value?"

Based on the answers of the survey, in general most of the centres communicate one or more of the criteria about the OUV. The information about the OUV is usually communicated by the whole staff and volunteers. The message that the centres want to bring across is mainly to let people experience the beauty and national and international uniqueness and vulnerability of the Wadden Sea area. They do this by communicating the different criteria whereby the Wadden Sea became a World Heritage and by giving a personal touch to the story. Some centres also communicate about the management, protection and integrity.

The centres use a wide scale of tools to communicate the information about the OUV (orally, during tours, presentation, film, flyer/poster). Some centres also use exhibitions, social media and their websites to communicate. The centres use interactive ways of communicating and let the visitors do things rather than only let them listen to their story. They believe that this is the best way to get their attention and to teach them about the Wadden Sea Area. A lot of the centres also noticed that the message of the OUV came across clearer when the story had a personal touch or link to the audience and/or guide. They do this by bringing the visitors out on the mudflats and showing them different organisms. The way of communicating also depends on the age of the visitors. In order to make some processes in the Wadden Sea clear such as tides and sedimentation, posters, animations and exhibitions are used to make the story more visual.

Out of the centres that responded to the survey, the following centres have good stories: Ecomare, Nationalpark-haus Neuwerk, Wadden Vereniging, Natuurcentrum Ameland, Bezoekers centrum Nationaal Park Schiermonnikoog, Nationalpark-Haus Dornumersiel, UNESCO World Heritage Visitors Centre Wilhelmshaven, Nationalpark-Haus Wangerooge, Schutzstation Wattenmeer Nationalpark-Seminarhaus Hallige Hooge, Erlebniszentrum Naturgewalten and Nationalpark-Haus Juist. All these centres had in common that they communicated most of the OUV criteria, used the storytelling criteria and used a lot of different tools to do so which resulted in labelling them as 'good stories'. The criteria most communicated were the Geological processes and the Biodiversity.

Most centres communicate at least one of the criteria of the World Heritage. The geological processes are the most communicated, followed by the biodiversity and ecological processes. Some centres also discuss the management and integrity aspect of the OUV. They do so mainly by giving tours to visitors.

These consist of mudflat tours and tours through expositions and/or museums present in their centre. Around half of the centres make use of film material and/or flyers. Some centres also use their website and social media to spread information about the Wadden Sea World Heritage.

There are different centres with different good stories. Not one of the centres had just one story that communicates all of the OUV criteria at once. The most common good story discusses the migration of birds through the Wadden Sea Area. This story can combine multiple criteria like biodiversity, ecological processes and integrity. Most stories become a good story when it has an emotional compound in it, linking the information to the visitor. The story depends on the guide telling it, but most good stories had in common that they were interactive and entertaining to hear.

## **Recommendations**

This research is mainly focused on what and how the centres communicate about the OUV and the good stories that the centres have. However, it would be beneficial to also look at why the centres did not communicate certain aspects and how they could improve this. The global answer that the centres gave to improve this was by telling the same story and by more communication between the centres and having regular trainings. Annual meetings and exchange of experiences and ideas are included in the Organisational Framework of the World Heritage, but this could be improved. It is recommended to not only have trilateral meetings, but also within the different countries themselves. Also, further research is needed to compare the differences between the centres and find out why these occur.

It is also recommended that the centres ask the visitors feedback more often in order to know if they understood why the Wadden Sea is World Heritage and to improve their stories. In this way the final step of the Laswell's model is also fulfilled. Furthermore, the IWSS could also hold surveys more often to find out what the different centres do and what they might need in the future.

Some centres only share their information in their own language on the website. It is recommended that the online information is also shared in different languages to broaden the target group.

Finally, there is no data on how Denmark communicates the OUV and which good stories are present. This should be researched in the future.

The results of this research will be shared by Anja with the Network Group Education and they will jointly decide on how to further proceed. There will be a Network Group meeting at the end of August and in this session, there will be discussed on how to improve World Heritage education at the next IWSS workshop in November. The results will also be shared with the workshop participants. What happens further with the results, whether they will be individually used by the centres or be integrated in further development of education on a regional level or if it will influence future IWSS products, will be clearer after the Network Group Education meeting and when Anja discussed it with the local and regional stakeholders.

## Literature

Bajracharya, S. (2018). *Lasswell's Communication Model*. Retrieved February 13, 2020, from <https://www.businessstopia.net/communication/lasswell-communication-model>

Common Wadden Sea Secretariat (CWSS). (2016). *Report on the State of Conservation of the World Heritage property "The Wadden Sea (N1314)"*. Retrieved September 16, 2019 from [https://www.waddensea-worldheritage.org/sites/default/files/2016\\_state%20of%20conservation%20report.pdf](https://www.waddensea-worldheritage.org/sites/default/files/2016_state%20of%20conservation%20report.pdf)

Common Wadden Sea Secretariat. (2018). *Shaping a sustainable tomorrow*. Retrieved September 16, 2020 from [http://www.iwss.org/sites/default/files/WHs\\_Education\\_Strategy.pdf](http://www.iwss.org/sites/default/files/WHs_Education_Strategy.pdf)

Common Wadden Sea Secretariat. (n.d.-a). *Becoming World Heritage*. Retrieved January 22, 2020, from <https://www.waddensea-worldheritage.org/becoming-world-heritage>

Common Wadden Sea Secretariat. (n.d.-b). *About* | International Wadden Sea School. Retrieved June 20, 2019, from <http://www.iwss.org/about>

Common Wadden Sea Secretariat. (n.d. -c). *It is our joint vision that in the future ...* | International Wadden Sea School. Retrieved April 1, 2020, from <http://www.iwss.org/it-our-joint-vision-future-%E2%80%A6>

European Tourism Futures Institute. (2017). *Toekomst van excursies en beleavingsactiviteiten in het Waddengebied*. Retrieved from [https://www.etfi.nl/sites/default/files/effectiviteitsmeting\\_wad-en\\_natuurexcursies\\_in\\_de\\_waddenzee.pdf](https://www.etfi.nl/sites/default/files/effectiviteitsmeting_wad-en_natuurexcursies_in_de_waddenzee.pdf)

Folmer, A., Revier, H., & Cupido, T. (2016). Sustainable tourism development and the world heritage status of the Wadden Sea: The case of Terschelling. *Research in Hospitality Management*, 6(1), 45–50. <https://doi.org/10.2989/rhm.2016.6.1.6.1294>

IWSS. (n.d.). *Our vision*. Retrieved 9 February 2020, from <http://www.iwss.org/it-our-joint-vision-future-%E2%80%A6>

Jarvis, P. (2020). *The 5 Common Elements of Good Storytelling*. Retrieved February 23, 2020, from <https://www.inc.com/paul-jarvis/the-5-common-elements-of-good-storytelling.html>

Kumar, R. (2011). *Research Methodology: A Step-by-Step Guide for Beginners* (Third). London: SAGE Publications Ltd.

Schutzstation Wattenmeer. (2019). Bildung für Nachhaltige Entwicklung. Retrieved 10 February 2020, from <https://www.schutzstation-wattenmeer.de/seminarhaeuser/bildung-fuer-nachhaltige-entwicklung-bne/>

UNESCO World Heritage Centre. (2014). Wadden Sea. Retrieved January 21, 2020, from <https://whc.unesco.org/en/list/1314/>

UNESCO World Heritage Centre. (2019). Operational Guidelines for the Implementation of the World Heritage Convention. Retrieved January 31, 2020, from file:///C:/Users/User/Downloads/document-57-19%20(1).pdf

UNESCO World Heritage Centre. (n.d.-a). World Heritage. Retrieved January 22, 2020, from <https://whc.unesco.org/en/about/>

UNESCO World Heritage Centre. (n.d.-b). *The World Heritage Committee*. Retrieved January 31, 2020, from <https://whc.unesco.org/en/committee/>

UNESCO World Heritage Centre. (n.d.-c). *The Criteria for Selection*. Retrieved January 22, 2020, from <https://whc.unesco.org/en/criteria/>

UNESCO. (2014). *Sustainable Tourism in the Wadden Sea World Heritage Destination*. Retrieved from [https://www.waddensea-worldheritage.org/sites/default/files/2014\\_tourism-strategy-en.pdf](https://www.waddensea-worldheritage.org/sites/default/files/2014_tourism-strategy-en.pdf)

UNESCO. (2019). *Framework for the implementation of education for sustainable development (ESD) beyond 2019* (General Conference 40th session). Geraadpleegd van <https://www.bne-portal.de/sites/default/files/40%20C%2023%20ESD.pdf>

Visit Wadden. (2020). Waddenzee Unesco Werelderfgoed - trilateraal. Retrieved March 21, 2020, from <https://www.visitwadden.nl/nl/verhalen/werelderfgoed/waddenzee-unesco-werelderfgoed-trilateraal>

## Appendix I: The visitor centres

This appendix provides a list of all the visitor centres in the Netherlands, Germany and Denmark.

### **The Netherlands**

Afsluitdijk Wadden Centre - UNESCO Wadden Sea World Heritage Visitor Centre  
Centre for Nature and Landscape  
De Noordwester Wadden Centre and Sea Aquarium  
Ecomare  
Kweldercentrum Noorderleech  
Nature Centre Ameland  
Schiermonnikoog Visitors' Centre  
Seal Centre Pieterburen  
Wadden Experience Centre Noordhoren  
Het Informatie Paviljoen  
Kweldercentrum Noorderleech

### **Germany**

Nationalpark-Schiff Feuerschiff Borkumriff  
Nationalpark-Haus Greetsiel  
Nationalpark-Haus Juist  
Seehundstation Nationalpark-Haus Norddeich  
Watt Welten UNESCO-Weltnaturerbe Wattenmeer Besucherzentrum Norderney  
Nationalpark-Haus Baltrum  
Nationalpark-Haus Dornumersiel  
Nationalpark-Haus Wittbülten  
Nationalpark-Haus Carolinensiel  
Nationalpark-Haus Wangerooge  
Nationalpark-Haus Wangerland  
Nationalpark-Haus Dangast  
UNESCO-Weltnaturerbe Wattenmeer Besucherzentrum Wilhelmshaven  
Nationalpark-Haus Museum Fedderwardersiel  
Nationalpark-Haus Wurster Nordseeküste  
Nationalpark-Haus Neuwerk  
UNESCO-Weltnaturerbe Wattenmeer Besucherzentrum Cuxhaven  
Seehundstation Friedrichskoog  
Nationalpark-Station Wattwurm Meldorf  
Nationalpark-Station Perlebucht  
Schutzstation Wattenmeer Friedrichskoog  
Nationalpark-Zentrum Multimar Wattforum  
Nationalpark-Haus Sankt Peter-Ording  
Nationalpark-Seminarhaus Westerhever  
Nationalpark-Haus Husum



Schutzstation Wattenmeer Nordstrand  
Schutzstation Wattenmeer Pellworm  
Nationalpark-Seminarhaus Hooge  
Nationalpark-Station Schafberg  
Naturzentrum Bredstedt  
Nationalpark-Seminarhaus Hooge  
Schutzstation Wattenmeer Langeneß  
Schutzstation Wattenmeer Amrum  
Nationalpark-Haus Wyk auf Föhr  
Naturkundemuseum Niebüll  
Arche Wattenmeer Hörnum

## **Denmark**

Vadehavscentret, The Wadden Sea Centre  
Myrthuegård nature exhibition  
Fisheries and Maritime Museum  
Naturcentre Tønnisgaard  
Sønderjylland Højer Mølle Museum  
Tirpitz museum and visitor centre  
The old sea rescue station  
SkallingenThe Vidå Sluice exhibition  
Naturzentrum Braderup  
Vidåslusen  
Erlebniszentrum Naturgewalten  
Museet Ribes Vikinger  
Blåvandshuk Fuglestation

## Appendix II: Blueprint online survey

### *Theme*

To find out how the different visitor centres presently communicate the OUV of the Wadden Sea World Heritage and if they have Good Stories about communication the OUV that other centres could learn from.

### *Research question*

What and how do the different visitor centres communicate about the Outstanding Universal Value of the Wadden Sea World Heritage to their different target groups and which 'good stories' exist that communicates this Value?

### *Sub-questions*

- What is being communicated about the OUV in the different visitor centres right now?
- How is the concept of the OUV being communicated?
- Which 'good stories' are present that communicate the value?

### *Concepts*

With this online survey it will be measured if the visitor centres communicate about the OUV and how they communicate this.

<i><b>One-dimensional</b></i>	<i><b>Multi-dimensional</b></i>
- Demographic	- Current approach
- Work	- Knowledge
	- Background
	- Opportunities

### *Variables*

Each abstract concept is translated into measurable variables that subsequently are translated into a question.

Current approach:

- Programs
- Utility
- Communication
- Target group
- Materials

Chances:

- Needs
- Future
- Materials

Knowledge:

- Cognition
- Utility

### *Research population*

The recipients of the online survey will be all the 60 visitor centres in the Netherlands, Germany and Denmark (Appendix II). The population are informants because they speak on behalf of a group (factual knowledge). Important background information of the recipients is in which region they work, in which centre they work, in what department they work and if they are in contact with the visitors. The online survey will be sent by email to the research population

### *Topics Inventory of main practical constraints*

The main practical constraints of this research:

- The responding time of the visitor centres will have a big influence on the rest of the research if the centres do not respond in time or do not respond at all.
- The measuring sensitive topics is expected to not have an effect. The questions of the online survey will not include sensitive topics.
- The cultural differences are not very considerable. The online survey will be sent to visitor centres in The Netherlands, Germany and Denmark. It is expected that the people in the visitor centres speak English because they are also in contact with tourists from different countries.
- Because there is no budget available for this research, the online survey will be sent with the use of a free website like SurveyMonkey.
- In order to seek for informed consent the study population is made aware of the type of information that we want from them, why the information is being sought, how the information will be used in this study, how they are expected to participate and how this study will affect them in the email that will be send with the online survey.
- It is expected that the online survey will not cause any harm because the questions are not very personal and there will be asked for facts rather than an opinion.

### *Orientation on online survey mode*

The online survey will be sent by email and filled in online. This is because the research population is scattered over a wide global area and there is no time or budget to visit them all in person. The advantages of this method are that it takes less time, the whole study population can fill in the survey at the same time and it is easier to process the data then with a survey on paper.

Disadvantages can be that there is no personal contact, that the response rate can be low and the opportunity to clarify issues is limited.

### *Required analyses*

The analysis of the data is going to be qualitative. After receiving response of the online survey, the data will be processed to ensure that the data is complete and consistent (Kumar, 2011). A nominal scale will be used for the first background variables and an ordinal scale will be used to analyse the rest of the variables. The data will be presented with the use of in *table 2* on the next page. First it will be determined if there is being communicated about the different aspects of the OUV. There will be a manually made overview of the key words of what is being communicated about the OUV. Secondly it will be described how this is being communicated. After this it will be concluded if it is enough to be defined as a 'good story'.

Table 4: The table that was used in order to analyse that data from the online survey

Nr. Name Centre:		Email:		
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)				
Ecological processes (IX)				
Biodiversity (X)				
Integrity				
Protection and management				
Components of storytelling				

### Email

Dear sir/madam,

We hope you had a great Easter despite of everything that is going on in the world.

We are Lonneke and Cheyenna, two Dutch students from van Hall Larenstein University in the Netherlands and we are doing our thesis with the International Wadden Sea School (IWSS).

Due to the unforeseen circumstances it is harder for us all to do our job. For us this means it is a bit harder to collect our data, but we really hope it is possible to take 5-10 minutes out of your time to fill in our survey about the communication of the Wadden Sea World Heritage Outstanding Universal Value in the visitor centres in the whole Wadden Sea Area!

The data that will be collected with this survey will be used in our final thesis and by the IWSS to get an overview on what and how there is being communicated about the World Heritage in the Wadden Sea Area.

Below you can find the link to the survey that will only take 5-10 minutes.

<https://www.surveio.com/survey/d/H2A0P8K6G0H8P1Z4A>

Thanks in advance!

With kind regards,

Lonneke Bitter and Cheyenna de Wit

## Appendix III: Questions online survey

### Background

1. In what region is your visitor centre? (Netherlands, Germany, Denmark) *demographic*
2. What kind of visitors do you welcome in your centre? (give a scale, school children, tourists, businessmen) *target group*
3. In what department do you work? (give options: communication, social media, PR etc.) *communication*
4. We are familiar with the three components of Outstanding Universal Value that made the Wadden Sea a World Heritage Site (strongly agree, agree, neutral, disagree, strongly disagree) (give some background information and the picture of the overview) *cognition*

### Approach

Give background information about the criteria of the OUV: geological processes (VIII), ecological processes (IX) and biodiversity (X) and the integrity, protection and management and the components of storytelling.

1. Check the boxes if you communicate about the following: *Communication*
  - The Wadden Sea Area has the largest unbroken system of intertidal sand and mud flats in the world
  - Nowhere on earth there is such a dynamic and varied coastal zone of this size
  - The changeability of the coastal zone in its shape by wind and tides
  - The processes that form islands, channels, mud flats, sandbanks, dunes and salts marshes
2. In what way do you communicate about this (give options, poster, flyer, film, presentation, aurally, other)? *Materials*
3. Check the boxes if you communicate about the following: *Communication*
  - The natural processes that have been largely undisturbed in the entire Wadden Sea Area for millennia
  - The geological and geomorphic features (tides, winds etc.) are closely connected with the biophysical processes
  - The geological, geomorphic and biophysical processes help the area to be dynamic to global changes
  - The multiple transitional zones between land, sea and freshwater is the basis for the species richness of the area
4. In what way do you communicate about this? (give options, poster, flyer, film, presentation, aurally, other) *Materials*
5. Check the boxes if you communicate the following: *Communication*
  - The Wadden Sea area is one of the largest wilderness areas in Europe
  - The area hosts around 10.000 species of plants and animals
  - The importance of the area goes beyond the borders, it is crucial for around 12 million migratory birds that make a stopover
  - The Wadden Sea area is one of the most important hotspots of biodiversity in the world
6. In what way do you communicate about this? (give options, poster, flyer, film, presentation, aurally, other) *Materials*

7. Check the boxes if you communicate about the following: *Communication*
  - The Wadden Sea World Heritage Site consists of all aspects (species, habitats, processes) that form a natural and dynamic Wadden Sea
  - The area is big enough to maintain all the critical ecological processes and to ensure the full function and processes which convey the importance of the site
8. In what way do you communicate about this? (give options, poster, flyer, film, presentation, aurally, other) *Materials*
9. Do you communicate about the following protection and management aspects: *Communication?*
  - The effective conservation state of the Wadden Sea area is the result of joint nature protection efforts
  - The Trilateral Wadden Sea Cooperation provides the overall framework for the management and the conservation of the area and provides coordination between the three countries: the Netherlands, Germany and Denmark
10. In what way do you communicate about this? (give options, poster, flyer, film, presentation, aurally, other) *Materials*
11. These subjects must be told in such a way that it suits the audience. If you use the following components of storytelling, check the box in the front. *Communication*
  - The story is easy to understand, and the language matches the audience (children, adults etc.)
  - The story has an emotional component (as example: humour, pain, joy)
  - The story has meaning and is relatable to the teller
  - The story is truthful in a way that the one telling the story also believes it
  - The story has the same effect and message, regardless of the size or the type of audience

#### *Chances*

1. There is a need for improvement about the communication of the OUV in your centre. (strongly agree, agree, neutral, disagree, strongly disagree)
2. Your centre needs to communicate more about the OUV (strongly agree, agree, neutral, disagree, strongly disagree)
3. Can we contact you in a later stage of our research for an interview for further information? (yes, depends, no)

## Appendix IV: Blueprint Interviews

### *Theme*

To find more in-depth information on how the different visitor centres that had a good story, presently communicate the OUV of the Wadden Sea World Heritage.

### *Research question*

What and how do the different visitor centres communicate about the Outstanding Universal Value of the Wadden Sea World Heritage to their different target groups and which 'good stories' exist that communicates this Value?

### *Sub-questions*

1. What is being communicated about the OUV in the different visitor centres right now?
2. How is the concept of the OUV being communicated?
3. Which 'good stories' are present that communicate the value?

### *Objectives per research question*

1. To find out what the selected centres communicate about the OUV  
Who communicated this.  
What kind of effect this has on the visitors.
2. How the centres communicate about the OUV and what tools they use.  
Find out what kind of method they use that makes the communication of the OUV successful.
3. If they want to improve certain things in their centre about the communication of the OUV.

### *Interview topics and aspects*

Current approach:

- Communication
- Message
- Effect

Chances:

- Tools
- Methods

Future:

- Change
- Improvement

### *Interviewees*

The interviewees are the eleven centres that have a good story based on what their answers to the survey. These are four centres from the Netherlands and seven from Germany. An invitation to the interviews will be send out by email.

### *Main practical constraints and ethical considerations*

- The responding time of the visitor centres will have a big influence on the rest of the research if the centres do not respond in time or do not respond at all.
- The measuring sensitive topics is expected to not have an effect. The questions of the interview will not include sensitive topics.
- The cultural differences are not very considerable. It is expected that the people in the visitor centres speak English or Dutch because they are also in contact with tourists from different countries.
- Because there is no budget available for this research, the interviews will be held with the use of the app Zoom where you can video call.
- In order to seek for informed consent the study population is made aware of the type of information that we want from them, why the information is being sought, how the information will be used in this study, how they are expected to participate and how this study will affect them in the email that will be send in the invitations.

### *Analysis*

The first step in analysing the interviews was transcribing them with the use of the audio recordings. The style choice for this was Content Only Transcription in which anything irrelevant to the content was ignored, indicated in the transcription with [...]. The content of the answers was the main priority rather than small talk. After this the interview was analysed by performing a coding analysis. Every interview question contained a certain theme and every theme got a certain colour. If the answer that the interviewee from a certain centre gave connected with the theme, the answer was highlighted in the same colour. The themes and highlighted answers were merged per centre in a table with the use of excel. Based on the answers conclusions were drawn per theme in the final column of the table (Kumar, 2011).

The order of showing the results was determined with the use of the research questions. First the results that focus on what is being communicated will be showed, second the results that show how there is communicated will be showed and finally an overview of the good stories that were found will be presented. Based on these results the final conclusions will be drawn with a combination of the literature research, the survey results and the interview results.



## Appendix V: Interview guide

### Introduction

- Thank you very much for joining us! We are Lonneke and Cheyenna and we are two Dutch students and we are doing our thesis with the International Wadden Sea School. The goal of our thesis is to get an overview on what and how there is communicated about the World Heritage in the Wadden Sea Area.
- As said in our invitation email, based on the survey analysis we drew the conclusion that your centre communicates a good story with respect to the Outstanding Universal Value, so we selected your centre for an interview based on the survey. During this interview we want to talk more in depth about the communication of the Outstanding Universal value and in what way you communicate about this to your visitors.
- Can we record this interview for later use? The recordings will be used in the transcribing process and they will be deleted after this.
- Is it okay if we use the name of your centre in our thesis? (it will be read by the IWSS and the supervisors from our university and will be added in the online data base of our school)

### Interview questions (English)

Based on the results of the survey we concluded that you communicate the Outstanding Universal Value to your visitors. We would like to get some more information on that.

1. Who communicates the information to the visitors in your centre? *Communication*
2. What is the exact message that you would like to communicate? *Message*
3. What kind of effect has this information on the visitors? *Effect*

#### **Summarise the answers and make sure that we understood it correctly**

4. What kind of feedback do you get from visitors about the OUV? *Feedback*
5. Do you believe the visitors understand what the OUV is? *Understanding*
6. Do you believe the visitors learn why the Wadden Sea is a World Heritage site? *Understanding*
7. What tools do you use to communicate to the visitors? (Can you send us some examples afterwards by email?) *Tools*
8. Can you give an example of a method or story that always brings the message of the OUV across to the visitors? And why does this work well? *Methods*
9. If you had the opportunity to change the communication of the OUV in your centre, what would you change and why? *Change*
10. Which practical tools do you think your centre could benefit from (an app, more film material,) to transfer the OUV? *Improvement*

### Interview questions (Nederlands)

Op basis van de resultaten van de enquête hebben we geconcludeerd dat u de Outstanding Universal Value aan uw bezoekers communiceert. Daar willen we graag wat meer informatie over krijgen.

1. Wie communiceert de informatie aan de bezoekers in uw centrum?
2. Wat is het exacte bericht dat u wilt overbrengen?
3. Welk effect heeft deze informatie op de bezoekers?

**4. Vat de antwoorden samen en zorg ervoor dat we het goed begrepen hebben**

5. Wat voor feedback krijg je van bezoekers over de OUV?
6. Geloof je dat de bezoekers begrijpen wat de OUV is?
7. Geloof je dat de bezoekers leren waarom de Waddenzee een Werelderfgoed is?
8. Welke tools gebruikt u om met de bezoekers te communiceren? (Kunt u ons nadien enkele voorbeelden per e-mail sturen?)
9. Kun je een voorbeeld geven van een methode of verhaal dat altijd de boodschap van de OUV aan de bezoekers overbrengt? En waarom werkt dit goed?
10. Als u de mogelijkheid had om de communicatie van de OUV in uw centrum te veranderen, wat zou u dan veranderen en waarom?
11. Van welke praktische hulpmiddelen zou uw centrum volgens u kunnen profiteren (een app, meer filmmateriaal) om de OUV over te dragen?

**End of the interview**

- Give a short summary of what the interviewee answered
- Ask if they have anything to add to the interview or has any questions
- Ask if they want to have the transcript of the interview
- Thank him/her for joining and tell them that if they have any questions that they can send an email

**Email by interview invitation**

Dear ...,

Thank you so much for filling in our survey! In the survey you indicated that we could contact you for an interview. The goal of the survey was to find so-called 'good stories' that met our criteria in communicating about the Outstanding Universal Value. Based on our analysis we draw the conclusion that your centre communicates a good story with respect to the Outstanding Universal Value, so we selected your centre for an interview based on the survey. During this interview we want to talk more in depth about the communication of the Outstanding Universal value and in what way you communicate about this to your visitors. The interview will take approximately one and a half hours.

We have a few options regarding the date:

- Monday May 4<sup>th</sup>
- Tuesday May 5<sup>th</sup>
- Thursday May 7<sup>th</sup>
- Monday May 11<sup>th</sup>
- Wednesday May 13<sup>th</sup>
- Thursday May 14<sup>th</sup> till 12 pm

Which of these options would suit you best?

We prefer to use Zoom for the interviews, but if you would like to use an alternative website or app, please feel free to say so. If you have any further questions regarding this interview or our research, please feel free to send us an email.

Hope to hear from you soon,

Cheyenna and Lonneke

## Appendix VI: The results from the online survey

In total, 55 emails were sent with the link to the online survey. The first respondent of the survey was at 30-03-2020 and the last one to answer was a little over a month later, on 28-04-2020.

### Geological processes

Figure 9 shows that 95,5% of the centres surveyed communicate in one way or another about the geological processes that made the Wadden Sea an UNESCO World Heritage site. Only one of the respondents did not communicate specifically about the geological processes. Of the 95,5% who did communicate these processes, different methods or combinations thereof are being used to transfer the information:

- 57,1% is shared aurally
- 95,2% is shared during tours
- 85,7% is shared during a presentation
- 52,4% makes use of film material
- 47,6% is shared via a flyer or poster
- 33,3% also uses other mediums

Antwoord	Antwoorden	Ratio
The Wadden Sea Area has the largest unbroken system of intertidal sand and mud flats in the world	20	90,9 %
Nowhere on earth there is such a dynamic and varied coastal zone of this size	15	68,2 %
The changeability of the coastal zone in its shape by wind and tides	17	77,3 %
The processes that form islands, channels, mud flats, sandbanks, dunes and salts marshes	15	68,2 %
None of the above	1	4,5 %

### Ecological processes

As can be seen in the figure below, 81,2% of the centres surveyed communicate in one way or another about the ecological processes of the Wadden Sea. Of this 81,2%, different methods or combinations thereof are being used to transfer the information:

- 55,6% was shared aurally
- 77,8% was shared during a presentation
- 44,4% made use of film material
- 27,8% was shared via a flyer or poster
- 38,9% used other mediums

- And all of the centrums that communicate about the biodiversity do so during tours

Antwoord	Antwoorden	Ratio
The natural processes that have been largely undisturbed in the entire Wadden Sea Area for millennia	7	31,8 %
The geological and geomorphic features (tides, winds etc.) are closely connected with the biophysical processes	14	63,6 %
The geological, geomorphic and biophysical processes help the area to be dynamic to global changes	8	36,4 %
The multiple transitional zones between land, sea and freshwater is the basis for the species richness of the area	15	68,2 %
None of the above	4	18,2 %

### Biodiversity

All of the respondents communicated about the importance of the Wadden Sea area and the fact that its importance reached further than the official land borders.

To transfer this information, the following methods are being used:

- 47,1% was shared aurally
- 76,5% was shared during a presentation
- 58,8% made use of film material
- 47,1% was shared via a flyer or poster
- 35,3% used other mediums
- And all of the centrums that communicate about the biodiversity do so during tours

Antwoord	Antwoorden	Ratio
The Wadden Sea area is one of the largest wilderness areas in Europe	18	85,7 %
The area hosts around 10.000 species of plants and animals	14	66,7 %
The importance of the area goes beyond the borders, it is crucial for around 12 million migratory birds that make a stopover	21	100 %
The Wadden Sea area is one of the most important hotspots of biodiversity in the world	13	61,9 %

### Integrity

Another important aspect of the OUV is the integrity. 27,3% of the respondents indicate to not communicate about the integrity at all. The other 72,7% communicate about the integrity in the following ways:

- 60% was shared aurally
- 73,3% was shared during a presentation
- 53,3% made use of film material

- 46,7% was shared via a flyer or poster
- 26,7% used other mediums
- And all of the centrums that communicate about the biodiversity do so during tours

Antwoord	Antwoorden	Ratio
The Wadden Sea World Heritage Site consists of all aspects (species, habitats, processes) that form a natural and dynamic Wadden Sea	15	68,2 %
The area is big enough to maintain all the critical ecological processes and to ensure the full function and processes which convey the importance of the site	7	31,8 %
None of the above	6	27,3 %

Nr. 3      Name Centre: Ecomare				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	Orally, during tours, presentation, film, flyer/poster, interactive exhibits	Communication of all the criteria sufficient.  Surprisingly, no components of storytelling. Misunderstood? Forgotten? -> ask in interview  Also, agrees that the centre might need to improve the communication about the OUV	Yes
Ecological processes (IX)	Yes	Orally, during tours, presentation, film, flyer/poster, interactive exhibits		
Biodiversity (X)	Yes (all)	Orally, during tours, presentation, film, flyer/poster, interactive exhibits		
Integrity	Yes	Orally, during tours, presentation, film, flyer/poster, interactive exhibits		
Protection and management	Yes (all)	Orally, during tours, presentation, flyer/poster, interactive exhibits		
Components of storytelling	Yes	Not applicable		

Nr. 4                      Name Centre: Nationalpark-Haus Neuwerk				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	Orally, during tours, presentation, film, flyer/poster	Communicated the criteria but does not use as much tools in order to do so	Yes
Ecological processes (IX)	Yes	During tours, presentation	Agrees that it would be beneficial if the centre communicates more about the OUV	
Biodiversity (X)	Yes (all)	Not filled in		
Integrity	Yes	During tours, film		
Protection and management	Yes	Orally, during tours		
Components of storytelling	Yes (all)	Not applicable		

Nr. 5                      Name Centre: Wadden vereniging				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	Orally, during tours, presentation, flyer poster	The Wadden Vereniging does not have a centre but organises guided tours  Agrees there might be a need to improve the communication about the OUV	Yes
Ecological processes (IX)	Yes	Orally, during tours, presentation, flyer poster		
Biodiversity (X)	Yes	Not filled in		
Integrity	Yes	Orally, during tours, presentation, flyer poster		
Protection and management	Yes	Orally, during tours, presentation, flyer poster		
Components of storytelling	Yes	Not applicable		

Nr. 7      Name Centre: Natuurcentrum Ameland				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	Orally, during tours, presentation, film, permanent exhibition	Communicate almost all criteria and use a lot of different tools  Neutral if there is a need for improvement	Yes
Ecological processes (IX)	Yes (all)	Orally, during tours, presentation, film, permanent exhibition		
Biodiversity (X)	Yes	Orally, during tours, presentation, film, permanent exhibition		
Integrity	Yes (all)	Orally, during tours, presentation, film, permanent exhibition		
Protection and management	Yes (all)	Orally, during tours, presentation, film, permanent exhibition		
Components of storytelling	Yes	Not applicable		

Nr. 9      Name Centre: Bezoekerscentrum Nationaal Park Schiermonnikoog				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	Orally, during tours, presentation, film, website, social media, local newspaper	Communicate all the criteria and use a lot of different tools to do so  Neutral if there is a need for improvement	Yes
Ecological processes (IX)	Yes	Orally, during tours, presentation, film, website, social media, local newspaper		
Biodiversity (X)	Yes	Orally, during tours, presentation, film, website, social media, local newspaper		
Integrity	Yes	Orally, during tours, presentation, film, website, social media, local newspaper		
Protection and management	Yes	Orally, during tours		
Components of storytelling	Yes	Not applicable		



Nr. 11    Name Centre: Nationalpark-Haus Dornumersiel				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	Orally, during tours, presentation, film, flyer/poster, seminar, training, website	All the criteria are communicated and a lot of tools are being used	Yes
Ecological processes (IX)	Yes	Orally, during tours, presentation, film, flyer/poster, seminar, training, website	Neutral if there is a need for improvement	
Biodiversity (X)	Yes (all)	Orally, during tours, presentation, film, flyer/poster, seminar, training, website		
Integrity	Yes	Orally, during tours, presentation, film, flyer/poster, seminar, training, website		
Protection and management	Yes (all)	Orally, during tours, presentation, film, flyer/poster, seminar, training, website		
Components of storytelling	Yes (all)	Not applicable		

Nr. 13    Name Centre: UNESCO World Heratige Visitors Centre Wilhelmshaven				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	Orally, presentation, film	Almost all of the components are being communicated.	Yes
Ecological processes (IX)	Yes (all)	Orally, during tours, presentation, film	Disagrees that there might be need for improvement about the communications of the OUV.	
Biodiversity (X)	Yes (all)	Orally, during tours, presentation, film	Agrees that it might be beneficial to communicate more about the OUV	
Integrity	Yes (all)	Orally, during tours, presentation, film		
Protection and management	Yes (all)	Orally, during tours, presentation, film		
Components of storytelling	Yes	Not applicable		

Nr. 14 Name Centre: Nationalpark-Haus Wangerooze				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	Orally, during tours, presentation, film, flyer/poster	Different mediums for different goals and stories.  Agrees that there might be need for improvement on the communication about the OUV and the amount of communication.	Yes
Ecological processes (IX)	Yes	Orally, during tours		
Biodiversity (X)	Yes	Orally, during tours, film, flyer/poster		
Integrity	Yes	Orally, during tours, flyer/poster		
Protection and management	Yes (all)	Orally, during tours, flyer/poster		
Components of storytelling	Yes (all)			

Nr. 18 Name Centre: Schutzstation Wattenmeer Nationalpark-Seminarhaus Hallige Hooge				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	Orally, During tours, Presentation	All the criteria are being communicated.  They agree that there might be a need for improvement	Yes
Ecological processes (IX)	Yes (all)	Orally, During tours, Presentation		
Biodiversity (X)	Yes (all)	Orally, During tours, Presentation		
Integrity	Yes (all)	Orally, During tours, Presentation		
Protection and management	Yes (all)	Orally, During tours, Presentation		
Components of storytelling	Yes (all)			

Nr. 20 Name Centre: Erlebniszentrum Naturgewalten				
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	During tours, presentation, film, flyer/poster	They communicate most of the criteria	Yes (but they cannot be contacted for interviews)
Ecological processes (IX)	Yes	During tours, presentation, film		
Biodiversity (X)	Yes (all)	Orally, during tours, presentation, film, flyer/poster		
Integrity	Yes (all)	During tours, presentation, film, flyer/poster		
Protection and management	Yes	During tours, presentation		
Components of storytelling	Yes (all)			

Nr. 15 Name Centre: Nationalpark-Haus Juist			Email: nationalparkhaus@gemeinde-juist.de	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	During tours, presentation, flyer/poster	All components are communicated	Yes
Ecological processes (IX)	Yes	During tours, presentation, flyer/poster, social media		
Biodiversity (X)	Yes (all)	During tours, presentation, flyer/poster		
Integrity	Yes (all)	During tours, presentation, flyer/poster		
Protection and management	Yes	During tours, presentation, flyer/poster		
Components of storytelling	Yes			

Nr. 6					Name Centre: Nationalpark-Zentrum Multimar Wattforum				
OUV criteria and components of storytelling		Is this being communicated (yes/no)		How is it communicated		Conclusion		Good story (yes/no)	
Geological processes (VIII)		Yes (all)		Orally, during tours, presentation, School programs		Communicates a lot of the criteria but did not fill in the question about story telling		No	
Ecological processes (IX)		Yes		Orally, during tours, presentation		Neutral if there is a need for improvement			
Biodiversity (X)		Yes		-					
Integrity		Yes (all)		Orally, during tours, presentation, School programs					
Protection and management		Yes (all)							
Components of storytelling		Unclear		Not applicable					

Nr. 10 Name Centre: Afsluitdijk Wadden Centre			Email: management@afsluitdijkwaddencentre.nl	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	During tours	This centre focusses more on the building of the afsluitdijk than the Wadden sea world heritage  Neutral if there is a need for improvement	No
Ecological processes (IX)	No	-		
Biodiversity (X)	Yes	During tours		
Integrity	Yes	During tours		
Protection and management	Yes	During tours		
Components of storytelling	Only 1	Not applicable		

Nr. 17 Name Centre: Naturschutzgemeinschaft Sylt			Email: info@naturschutz-sylt.de	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	During tours, presentation, flyer/poster	Communicate most of the criteria but not all of them	No
Ecological processes (IX)	Yes	During tours		
Biodiversity (X)	Yes (all)	During tours, presentation, flyer/poster		
Integrity	No	-		
Protection and management	Yes	During tours		
Components of storytelling	Yes	-		

Nr. 19 Name Centre: NP-haus Langeneß			Email:	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes (all)	During tours, presentation, exhibition	They communicate most of the criteria but 1 of the components of story telling  Neutral if there is a need for improvement	no
Ecological processes (IX)	Yes	During tours, presentation, exhibition		
Biodiversity (X)	Yes (all)	During tours, presentation, exhibition		
Integrity	Yes	-		
Protection and management	Yes	During tours, presentation, exhibition		
Components of storytelling	Only 1			

Nr. 21 Name Centre: Arche Wattenmeer			Email:	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	Orally, during tours, presentation, film, flyer/poster	Communicate most of the criteria but not all  Disagree that there is a need for improvement	No
Ecological processes (IX)	Yes	Orally, during tours, presentation, film, flyer/poster		
Biodiversity (X)	Yes	Orally, during tours, presentation, film, flyer/poster		
Integrity	No			
Protection and management	Yes	Orally, during tours, presentation, film, flyer/poster		
Components of storytelling	Yes (3)			

Nr. 22 Name Centre: Museum of Southwest Jutland			Email:	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	No	-	Does not communicate one of the criteria  Might be that this centre focusses strictly on things other than the Wadden Sea	No
Ecological processes (IX)	No			
Biodiversity (X)	No			
Integrity	No			
Protection and management	No			
Components of storytelling	No			

Nr. 23 Name Centre: Nationalpark-Haus St. Peter-Ording			Email:	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	During tours	Not all the criteria are communicated  Agrees that there might be need for improvement	No
Ecological processes (IX)	No			
Biodiversity (X)	Yes	During tours, film, exhibition		
Integrity	No			
Protection and management	Yes	During tours		
Components of storytelling	Yes (3)			

Nr. 24 Name Centre: Westküstenpark & Robbarium			Email:	
OUV criteria and components of storytelling	Is this being communicated (yes/no)	How is it communicated	Conclusion	Good story (yes/no)
Geological processes (VIII)	Yes	During tours, presentation, animal feeding show	Communicate a few of the criteria  Agrees that there might be a need for improvement	No
Ecological processes (IX)	Yes	During tours, presentation, animal feeding show		
Biodiversity (X)	Yes	During tours, presentation, animal feeding show		
Integrity	No			
Protection and management	Yes	During tours, presentation		
Components of storytelling	Yes			

## Appendix VII: Results of the interviews

Link to excel sheet: [Interview results](#)