

# One Buoy Tender and three Aid Vessels to Indonesia

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## Table of Contents

Executive Summary.....	5
1. Introduction .....	8
2. Project Overview .....	9
2.1. Context .....	9
2.2. The Transaction .....	9
2.3. The Stakeholders and the Client .....	9
2.4. Financing of the Transaction.....	10
3. Methods of Evaluation .....	11
3.1. Theory of Change.....	11
3.2. Evaluation Criteria.....	11
3.2.1 Efficiency.....	11
3.2.2 Effectiveness.....	12
3.2.3 Sustainability .....	12
3.2.4 Relevance.....	12
3.2.5 Additionality.....	12
3.2.6 Coherence .....	12
3.3. The Counterfactual .....	13
4. Results of the Evaluation .....	14
4.1. Efficiency .....	14
4.1.1 The Application Process.....	14
4.1.2 The Procurement Process .....	14
4.1.3 Implementing the Transaction.....	14
4.1.4 Other Efficiency Issues.....	15
4.2. Effectiveness .....	15
4.2.1 Availability of Aid vessels and Maintaining the Sea Line Marking.....	15
4.2.2 Improve the Use of the Aid Vessels .....	15
4.2.3 Are There Less Accidents at Sea?.....	15
4.2.4 Transfer of Shipbuilding Technology and Know-how .....	16
4.2.5 Crew Training and Maintenance.....	17
4.3. Sustainability.....	17
4.3.1 Financial.....	17
4.3.2 Maintenance .....	17
4.3.3 Institutional .....	17
4.3.4 Environment .....	17
4.4. Relevance, Additionality and Policy Coherence.....	17
4.4.1 Relevance.....	17
4.4.2 Additionality.....	17
4.4.3 Coherence .....	18
4.4.4 Other Effects.....	18

Annexes.....	19
Interviewees.....	19
Sources of Information .....	20
The Procedure for Foreign Grants and Loans in Indonesia .....	21

## List of Tables

Table 1: Result Chain .....	11
Table 2: Accidents at Sea in Indonesia by Type, 2007-2013.....	16
Table 3: Number of Workers* at P.T. Dumas Shipyard .....	16

## Figures

Figure 1: Planning Mechanism of External Loan and/or Grants.....	21
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# Executive Summary

## *Transaction*

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1. The transaction (ID00250) involved the supply of one Buoy Tender and three Aid Vessels to Indonesia, training and technical management support, and the transfer of knowledge to a local shipyard. The definitive transaction amount was € 35,983,719 while the definitive ORET grant was determined at € 13,524,329, bringing the grant element to 38%. The transaction aimed to increase the safety of sea lanes in the Indonesian archipelago, with a view to reducing the number of accidents and increasing the transport capacity of these sea lanes. In addition, it intended to transfer knowledge to a local ship builder.
2. The evaluation of this transaction is based on the following sources of information:
  - Relevant documents in the ORET archives administered by ORET.nl, such as the grant agreement, feasibility studies and appraisal documents, progress reports, technical reports and monitoring reports.
  - Documents and data provided by the Indonesian authorities and other stakeholders in the country.
  - Various publications on the situation of "Aids to Navigation" in Indonesia.
  - Interviews with stakeholders in the Netherlands and Indonesia during the period April–August, 2014.

## *Efficiency*

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3. **Application.** The first application for ORET support for this transaction was submitted in June 2003 but cancelled due to local administrative reasons. Our respondents stated that the delay of the first application was not due to the ORET application procedure but was related to the fall-out from the tsunami in December 2004. The application was re-submitted in June 2005 and the grant agreement was signed in August 2006. The second application was processed efficiently, in both The Netherlands and Indonesia.
4. The Dutch company Damen was the only bidder to offer that the vessels would be constructed in Indonesia. This was required by the Indonesian government in order to facilitate the transfer of shipbuilding technology. The Indonesian price check, which is part of the Indonesian procurement regulations, showed that the transaction costs were reasonable. This was confirmed by the price check done by ORET.nl.
5. **Implementation.** PT Dumas in Surabaya was selected as the local shipyard for assembling the vessels. On May 29, 2009 two aid tender vessels were ready and handed over by the Minister of Transportation to the Navigational Unit in Ambon, Maluku, and to the Navigational Unit in Pontianak, West Kalimantan. On November 14, 2009, the Minister of Transportation handed over the third aid tender vessel to the Navigational Unit in Palembang and the buoy tender vessel to the Navigational Unit in Surabaya. The construction of the vessels was implemented as planned.
6. The end user of the vessels, i.e. the Directorate of Sea Transportation of the Ministry of Transportation, acknowledged its satisfaction with the vessels. It was pleased with the quality of the vessels and the services provided by Damen, the training of the crew and technicians and the after-sales services.
7. The transaction included transfer of technology from Damen to the local shipyard during the shipbuilding process. The Damen team of supervisors, who were stationed in Surabaya, was responsible not only for ensuring that the vessels would be constructed to meet the standard specifications but also for this to be done on time. In the process the team transferred technical know-how on shipbuilding and coached the local staff on maintaining discipline and work ethics.

## *Effectiveness*

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8. The vessels replaced four of the total fleet of 62 navigational vessels currently operational in Indonesia. These new vessels are considered the flagships of the navigational fleet and increased to some extent the country's navigational capacity because they are faster and lose less time in maintenance than the ships they replaced. Yet, according to representatives of the Ministry of

Transportation, the replacement of one buoy tender vessel and three aid tender vessels is far from sufficient to meet the required navigational capacity of Indonesia.

9. Representatives of the Ministry of Transportation stated that despite delivery of the new vessels, there is still a need for additional navigational vessels. The marking of sea lanes is still inadequate, with insufficient and unmaintained navigational buoys resulting in accidents at sea. Unfortunately, there is no data available for assessing the improvement in sea lane marking and maintenance of buoys, resulting from the new navigational vessels. And even with sufficient data it would be virtually impossible to attribute improvements to this particular ORET-financed transaction, because the new vessels are being used for the same purposes as the old ones. The vessels are placing, maintaining, and replacing navigational buoys plus performing any other maritime tasks occasionally assigned by the government, such as evacuating victims of sea accidents and carrying out search and rescue missions. Unavailability of data on the permitted speed in and load capacity of Indonesian sea lanes has prevented further assessment of the transaction's impact in those areas.

10. The training, coaching and technological transfer been given by Damen have contributed significantly to the introduction of the latest shipbuilding technology in Indonesia. It has also contributed to a more organised work ethic and attitude at the PT Dumas shipyard. As a result, the confidence of potential clients in the ability of PT Dumas to produce high quality vessels and deliver them on time, has increased considerably. This is reflected in the increasing number of national and international orders since the transaction was finalised.

11. After the transaction, Damen continued its business relationship with Dumas. Facilitated by the favourable trade and investment policies in Indonesia that exempted the production of exportable goods from paying value added taxes on imported raw materials, Damen found it profitable to outsource some of its vessel production to Dumas. This collaboration, however, ended in 2012, since Indonesia no longer exempts Damen from paying the value-added tax on imported items. According to Damen, this made the outsourcing of shipbuilding activities to the Indonesian shipyard no longer profitable.

12. Several respondents mentioned that the transaction has contributed significantly to the increase in local shipbuilding activities because national and international clients show more trust in PT Dumas' ability to produce high quality ships on time. This change also seems to have increased the willingness of national banks to finance these activities. Previously, banks considered national shipbuilding to be an industry to be avoided because of its high default risk on loans due to its limited and unstable demand, partly related to the quality of the supply.

### ***Sustainability***

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13. **Financial.** Regarding financial sustainability our respondents at the Ministry of Transportation, do not foresee any problem of maintaining the future operations of the vessels. In order to guarantee the sustainability of the vessels, the Ministry of Transportation includes their maintenance cost in its annual budget proposal to the Ministry of Finance. So far, the requested allocations have always been approved, because the government considers an up-to-date 'aids to navigation' system to be a high priority for a maritime nation such as Indonesia.

14. **Maintenance.** The respondents also affirmed that they had not encountered any significant problems in ensuring maintenance and finding appropriate spare-parts for the vessels if needed because of the good after-sales service by Damen and the excellent technical and business collaboration between Damen and the local shipyard PT Dumas.

15. **Environment.** The new vessels have been constructed using the most recent technology, resulting in them being more fuel efficient and less polluting than the vessels they replaced. Regrettably, no data is available on fuel savings or other environmental performance indicators. The grant agreement with the Indonesian government required that the old ships were to be scrapped in an environmentally safe way. According to the information from the client this has indeed been done.

### ***Relevance***

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16. **Relevance.** All Indonesian government programs and projects financed by external loans and grants have to fit in Indonesia's medium term development plan. The provision of additional navigation vessels was indeed included in the so called Blue Book, a formal document listing the priorities of the Government of Indonesia; this confirms the relevance of the transaction.

### ***Additionality***

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17. **Additionality.** At the time of the application several alternatives were available as a source of financing for the replacements of the navigation vessels, such as soft loans loan from Japan, China and Denmark. The financing and other conditions offered by ORET were, however, considered the most beneficial for Indonesia, not only because of size and concessionality of the ORET grant but, probably more important, the willingness and the ability of the Dutch company to assemble the ships in Indonesia and transfer shipbuilding technology. The Indonesian authorities mentioned that, in the absence of the ORET grant, they would have bought the vessels from another country that also offered 'soft' financing conditions, simply because Indonesia needed the vessels.

### ***Policy Coherence***

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18. **Coherence.** The transaction fitted well with the Netherlands' policies to strengthen its economic relationships with emerging markets. As one of the larger countries of South-East Asia, Indonesia is considered to be an important business partner. The non-grant funding came from a Dutch bank that was insured by Atradius DSB against the risk of non-payment.

# 1. Introduction

This document presents the results of the evaluation of an ORET-supported transaction to Indonesia. The transaction (ID00250) involved the supply of one Buoy Tender and three Aid Vessels, training and technical management support and the transfer of knowledge to a local shipyard. The definitive transaction amount was € 35,983,719 while the definitive ORET grant was € 13,524,329, resulting in a grant element of 38%. The transaction aimed to increase the safety of sea lanes of Indonesia, with a view to reducing the number of maritime accidents and increasing the transport capacity of these sea lanes. In addition, it intended to transfer shipbuilding knowledge to a local shipbuilder.

This case study is part of the evaluation of the ORET programme covering the period 2007-2012. The evaluation of this transaction is based on the following sources of information:

- Relevant documents in the ORET archives administered by ORET.nl, such as the grant agreement, feasibility studies and appraisal documents, progress reports, technical reports and monitoring reports.
- Documents and data provided by the Indonesian authorities and other stakeholders in the country.
- Various publications on the situation of "Aids to Navigation" in Indonesia.
- Interviews with stakeholders in the Netherlands and Indonesia during the period April – August, 2014.

The structure of this report is as follows. After this introduction the second chapter describes the transaction and the main stakeholders. The third chapter provides the results chain and the methods applied in the evaluation. The fourth chapter assesses the performance of the transaction according on the evaluation criteria efficiency, effectiveness, sustainability, relevance, additionality and policy coherence.



## 2. Project Overview

### 2.1. Context

The Indonesian archipelago consists of about 17,000 islands spread over an area of approximately 2000 by 5000 square kilometres. Sea transport is therefore extremely important in the country. Shipping is the main mode of transport of goods between its islands. The Indonesian waters are also used as the gateway to neighbouring countries by big oil tankers, container carriers, cruise ships, etc. Monitoring and safely guiding these maritime movements require a sound operating 'Aids to Navigation' system. Against this background the Indonesian Government had, with assistance of the Japanese government, formulated a master plan for improving the national 'Aids to Navigation' system. This master plan is also a reaction to the pressure of the international maritime community which demanded an improvement of the quality and safety of the sea lanes in the country's waters. The master plan included, among other objectives, expanding and replacing a number of buoy tenders and aid vessels. The plan identified a shortage of these ships and concluded that quite a number of these ships are no longer up-to-date.

The safety of the sea lanes of Indonesia is, among others, threatened by obsolete and/or insufficiently maintained buoys and aid vessels. The Japanese master plan helped Indonesia to address these problems, with Japanese development aid supplying some of the necessary equipment. The ORET project also aimed to contribute to improving the safety of shipping in Indonesian waters, by supplying one Buoy Tender, a ship to lay navigation markers at sea, and three aid vessels.

### 2.2. The Transaction

The transaction involved the supply of one Buoy Tender and three Aid Vessels, training and technical management support and the transfer of knowledge. The project's aim was to improve the safety and increase the transport capacity of the sea lanes, with a view to reducing maritime accidents and using the sea lanes more efficiently by demanding international and national customers. With inadequate markings, ships have to sail slower within narrower routes, thereby limiting the transport capacity of these sea lanes and increasing the risks of accidents. The ships supplied by Damen replaced old and less efficient vessels. They operate in various parts of Indonesia, marking sea lanes, monitoring and guiding the commercial ships that use these lanes, and providing assistance in case of emergencies. The transaction provided Indonesia with four new ships that are faster, have more efficient fuel consumption and are less polluting compared to the ships that they replace. In addition, the transaction aimed at generating employment and building capacity at the Indonesian shipyard PT Dumas, which used to be focused on repairing ships rather than building new ships.

Damen Shipyards was selected as the supplier of the vessels. A main feature of the transaction was that the components of the vessels were produced outside Indonesia, mainly in the Netherlands. The components were then transported to Indonesia where they were assembled at the Indonesian shipyard PT Dumas in Surabaya. The transaction included also the supply of spare-parts for a period of three years, technical assistance and management support to PT Dumas. Further, the crews of the ships were trained in handling the new vessels. The ships were designed and produced to meet the international standards for such ships. The applicant, Damen Shipyards, which has great experience in building such ships, closely supervised and supported the assembly process at the local yard.

### 2.3. The Stakeholders and the Client

The main client was the **Directorate General of Sea Communication of the Ministry of Communications of Indonesia (DGSC)**. This Directorate employs 3350 persons, of which 139 work at the central staff department in Jakarta. One of DGSC's responsibilities is to establish safe shipping lanes in the Indonesian archipelago. In order to execute this task, it operates more than 70 ships, among them survey vessels, buoy vessels, aid tender vessels and inspection boats. The ships are organised in 21 navigational units across Indonesia. At the time of the application more than 30 ships were older than 30 years and ready to be scrapped. One of the conditions of the grant agreement was that the ships to be replaced would be scrapped in an environment-friendly way.

The applicant was **Damen Shipyard Gorinchem BV**, a full daughter of the Damen Shipyards Group. Damen Shipyard Gorinchem is one of the most successful shipyards in the Netherlands, which employed at the time of the application 440 persons. It has extensive experience in having ships build and assembled by local shipyards in developing countries under its supervision. Outsourcing a substantial part of the shipbuilding activities to countries with relatively low wages creates a competitive advantage in the highly competitive international shipbuilding market. A successful example is the company's ship building activities in Vietnam. From the perspective of the applicant, this transaction was considered a stepping stone in strengthening its business relationship with the shipbuilding industry in Indonesia.

**PT. Dumas Tanjung Perak Shipyard** was the shipyard selected as the counterpart of Damen to assemble the four ships for which the components and parts were supplied from the Netherlands. PT Dumas started as a ship repair company but gradually evolved into a complete shipyard capable of building new ships that meet international standards. The cooperation with Damen Shipyards also helped PT Dumas to expand its production of ships for the international market. In cooperation with Damen Shipyard, PT. Dumas has produced various vessel types for international clients such as the Nigerian Dredging Company, the Mexican Offshore Company, and the Curaçao Port Authority.

**Bappenas**, the National Planning Agency of Indonesia, plays a crucial role in the approval process of all internationally (co-)financed investment projects in Indonesia. The relevant ministry, in this case the Indonesian Ministry of Communication, had to submit a project proposal including financing modalities to Bappenas. The Agency evaluated the proposal taking into account the country's development priorities as formulated in the medium term national development plan (Rencana Pembangunan Jangka Menengah Nasional- RPJMN). Proposals that meet the qualification criteria are included in the List of Medium-Term Planned External Loans and Grants (Daftar Rencana Pinjaman dan Hibah Luar Negeri Jangka Menengah--DRPHLN-JM), or the Blue Book. Projects that meet the readiness criteria and that receive funding from international development partners are listed in the Priority List of Planned External Loans and Grants (Daftar Rencana Pemanfaatan Pinjaman Luar Negeri—DRPPLN), or the Green Book. Projects that are considered ready for implementation are submitted to the Ministry of Finance for funding negotiations with international development partners. This transaction followed the normal stages of this process and was approved, confirming that it was in line with the country's development priorities.

## 2.4. Financing of the Transaction

The total transaction amount in the application was € 36,200,000, which included € 2,930,000 for financing costs of the non-grant funds. With 75% of the financing costs compensated from the grant and a 35% grant share of the transaction cost, the total grant amount was determined at € 13,524,329, or 38% of the total transaction amount. The non-grant share of the transaction costs was financed with a commercial export credit provided by the ING bank at conditions negotiated between ING and the Indonesian authorities, in casu the Indonesian Ministry of Finance. Atradius DSB provided the insurance to cover the credit risk of the loan.

### 3. Methods of Evaluation

#### 3.1. Theory of Change

The results chain presented in Table 1, summarizes the main elements of the transaction that will be investigated in this evaluation. The ultimate objective of the transaction was improving the safety of the Indonesian shipping lanes. At the same time it aimed to increasing the transport capacity of these sea lanes. It was expected that this would result in a reduction of shipping accidents and a more efficient use of the shipping lanes. This would reduce the number of casualties and material damage and reduce transportation costs, thereby improving the country’s maritime comparative advantage. Since the new ships were built using the latest technology and in accordance with international standards, it was also expected that their operational costs would be lower, because they use less fuel and are more environment-friendly than the ships they replaced.

Another effect of the transaction resulted from the way it was implemented. The strong involvement of a local shipyard in the assembly of the vessels fitted nicely with Damen’s approach. This was also a requirement of the Government of Indonesia who incentivises the Indonesian ship building industry. In order to achieve this objective, a substantial part of the ORET transaction was focused on providing technical assistance and training the staff at the local shipyard.

**Table 1: Result Chain**

Inputs	Activities	Outputs	Outcomes	Long-term Outcomes
<ul style="list-style-type: none"> <li>▪ Materials for one buoy tender (ship)</li> <li>▪ Materials for three aid ships</li> <li>▪ ORET grant</li> <li>▪ Labour at PT Dumas</li> <li>▪ Labour at Damen Shipyards BV</li> <li>▪ Technical assistance, training and supervision</li> <li>▪ Materials for spare parts</li> </ul>	<ul style="list-style-type: none"> <li>▪ Production of the parts ready for assembly by Damen Shipyards</li> <li>▪ Assembly of one buoy tender and three aid ships at PT Dumas</li> <li>▪ Training of beneficiary employees for using and maintaining the ships</li> <li>▪ Supervision of the assembly by Daman Shipyards</li> <li>▪ Training of employees of PT Dumas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Four new ships delivered to the beneficiary</li> <li>▪ TA and training delivered to the beneficiary</li> <li>▪ Spare-parts for at least three years</li> <li>▪ TA and management support delivered to PT Dumas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved maintenance of sea-lane marking</li> <li>▪ Improved use of aid vessels</li> <li>▪ PT Dumas acquires ship-building capabilities.</li> <li>▪ PT Dumas has access to the latest shipbuilding technology.</li> <li>▪ Higher speed and capacity of ships using Indonesian sea-lanes, resulting in lower transportation costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduction in the number of accidents in Indonesian sea-lanes.</li> <li>▪ Increase in the capacity and demand for vessels built in Indonesia.</li> <li>▪ Increase in the number of employment absorbed in the shipbuilding industry.</li> <li>▪ Reduction of pollution</li> <li>▪ Lower transportation costs improving competitive advantage.</li> </ul>

#### 3.2. Evaluation Criteria

The evaluation of the transaction was conducted according to the following criteria: Efficiency, Effectiveness, Sustainability, Relevance, Additionality and Coherence. These criteria were defined as follows:

##### 3.2.1 Efficiency

Efficiency concerns the outputs of the transaction, i.e. the supply of four vessels and the related training and management support, and measures the extent to which these outputs have been realized by the inputs as agreed and at the lowest possible cost.

For this evaluation the efficiency of the transaction was determined on the basis of existing documents of the implementing agencies (e.g. dossiers ORET.nl, official documents of the Indonesian authorities, etc.) and information on realized outputs (supply of the ships, management

support, training and capacity building), budget, delays and their causes. In addition, interviews with the main stakeholders were held in the period April–August 2014.

For evaluating the technical aspects under the efficiency criterion, the following indicators are used concerning the functioning of the ships. These indicators are also important to analyse the technical sustainability of the project.

- Availability of the ships that were delivered;
- Present quality and status of the vessels delivered;
- Number of staff trained;
- Status of the shipyard PT Dumas.

The institutional analysis was based upon information from the relevant authorities, such as the Directorate General of Sea Communication of the Ministry of Communications of Indonesia (DGSC), Bappenas and the management of PT Dumas.

### ***3.2.2 Effectiveness***

Effectiveness is the extent to which the transaction has contributed to the achievement of the project's expected results or objectives. Here a distinction is made between direct effects and intermediate/long-term effects on the recipient country's economy and the Dutch company.

Effectiveness was determined on the basis of in-depths interviews with stakeholders and relevant documentation. The responsibility for the sea shipping navigational services is with the Directorate General of Sea Communication of the Ministry of Communications of Indonesia (DGSC), its local and regional representative offices and the crews of the ships. These interviews also covered such issues as technical, financial and administrative aspects of the vessels and whether the vessels are working properly.

The effectiveness of this transaction also refers to the effects on the involved shipyard PT Dumas and the Indonesian shipbuilding industry in general. These issues were discussed with representatives of the industry and the shipyard.

### ***3.2.3 Sustainability***

Sustainability is defined as to what extent the transaction activities can be continued independently after completion of the contract between the supplier and the client. This concerns the following three aspects: technical, financial and institutional. The information collected in the interviews supported the analysis of these aspects. Financial sustainability is analysed on the basis of the budgetary allocations made by the Government and the Ministry of Communications. Institutional sustainability is explored by disentangling the operational process of the services provided.

### ***3.2.4 Relevance***

The evaluation has assessed relevance by determining whether the objective of an intervention was consistent with the beneficiaries' requirements, the country needs, and the partners' policies. Relevance should further demonstrate whether the transaction made a sustainable contribution in achieving the ultimate objective (the impact). This point has been evaluated throughout the study by assessing whether the transaction has contributed to improving the overall safety and capacity of the sea lanes and developing the local shipyard and national shipbuilding industry.

### ***3.2.5 Additionality***

The evaluation has assessed whether the transaction would have been implemented without ORET support and whether ORET triggered other funding sources.

### ***3.2.6 Coherence***

Under coherence the evaluation has analysed to what extent the ORET programme and transactions have complemented or contradicted other instruments of Dutch development cooperation and foreign (economic) policy.

### 3.3. The Counterfactual

Performance indicators are also dependent on external factors, such as the availability of financial and human resources, the political decisions and the changes in the management of the local 'Aids to Navigation' system. Therefore an assessment of the effects and impact of the supply of these vessels also requires an analysis of what would have happened without the transaction. In this case this is rather difficult for various reasons. First of all, the vessels provided by this transaction have replaced older ships but form only a small part of the total Indonesian fleet navigational vessels. As such, the total capacity of the 'Aid to Navigation' system improved because the new vessels are more efficient than the ones they replaced. The new vessels, designed and produced to meet international standards, are faster and use less fuel than the ships they replaced. They are operational more days per year because they require less maintenance and if needed less time. As a result, they increased the supervising capacity of DGSC and saved on fuel costs though the ultimate effects are rather limited. Another problem was that there is neither a baseline nor a control group. Therefore it was not possible to establish what the contribution of the four new vessels has been to a possible change in safety and capacity of the sea lanes.

The results chain also shows that the strong involvement of a local shipyard is expected to have a long term positive impact, on the capacity of PT Dumas and on future demand for ships built by this yard. The cooperation with Damen has improved the reputation of PT Dumas. It resulted in an increasing number of orders from inside and outside Indonesia. Although here the counterfactual is unknown, it can be concluded that these effects would not have taken place if Damen had not involved the shipyard in the ORET transaction.

## 4. Results of the Evaluation

### 4.1. Efficiency

#### 4.1.1 *The Application Process*

The first application for this transaction was submitted in June 2003. However, after an extension with one year the application was cancelled. The application for an ORET grant was re-submitted by Damen Shipyards after a preliminary agreement with the Directorate General of Sea Transportation on June 15, 2005. Since then, it took almost another year for the contract signing to take place (May 24, 2006). Our respondents of the Directorate General of Sea Transportation mentioned that the cancellation of the first application was primarily caused by the fall-out of the tsunami that hit Indonesia on December 26, 2004 requiring the concentration of all available human and financial resources on the recovery efforts. It was firmly stated that the delays were not due to administrative complexity of the ORET application procedure. Our respondents even mentioned that the ORET programme was flexible enough to allow the Directorate General of Sea Transportation to get several extensions during the application process. The second application was dealt with very efficiently in both the Netherlands and Indonesia.

#### 4.1.2 *The Procurement Process*

The procurement process started after the contract signing with Damen as the only bidder. This was due to the requirement of the Directorate of Sea Transportation, which wanted the assembly of the vessels to take place in Indonesia and so facilitate the transfer of shipbuilding technology. Although Damen was the only bidder, the Directorate of Sea Transportation still had to comply with the procurement procedure of the national procurement regulations. This regulation requires that a price check should be conducted to verify whether the offered price was reasonable, and price negotiations. Our respondents of the Directorate of Sea Transportation recalled that they were successful in reducing the contract price by 3-4%. The Directorate stated that the price of the vessels was considered to be reasonable and fitting within their own estimates, especially when taking into account the grant element of ORET. The complete package, including the ORET grant, was considered to be more attractive than a competing offer from Japan. The prices were also checked as part of the application procedure by ORET.nl. This check concluded as well that the prices were reasonable and market-compatible.

In the interview, the end user of the vessels, i.e. the Directorate of Sea Transportation of the Ministry of Transportation, acknowledged its satisfaction with the vessels. It is pleased with the quality of the products and the after-sales services provided by Damen, among them the training of the crews and technicians.

#### 4.1.3 *Implementing the Transaction*

Selecting the local partner for assembly of the vessels was the one of the first things Damen did during project implementation. The PT Dumas shipyard in Surabaya, Indonesia, was selected from three shipyards that were assessed. This shipyard was chosen, mainly because of Damen's previous experience with Dumas, when the partners collaborated in building two Marine Disaster Prevention Vessels in the period 2002-2004.

The actual shipbuilding process of the commissioned vessels started only in May 2006. As indicated in the contract between Damen and the Directorate General of Sea Transportation, the process was projected to take 30 months. On May 29, 2009, two aid tender vessels were ready. In an official ceremony the Minister of Transportation handed over the vessels to the Navigational Units in Ambon, Maluku and Pontianak, West Kalimantan. The vessel stationed in Ambon was called Alphard and the one stationed in Pontianak was named Alnilam. On November 14, 2009, the Minister of Transportation handed over the third aid tender vessel, named Andromeda, to the Navigational Unit in Palembang (South Sumatra), and one buoy tender vessel, called Bimasakti, to the Navigational Unit in Surabaya (East Java).

The contract also specified that Damen would be transferring technology to the local shipyard during the shipbuilding process. In order for the vessels to meet the agreed standard specifications and to facilitate the transfer of knowledge, Damen sent a team of eight supervisors from the Netherlands to Surabaya to supervise the shipbuilding activities. The team was responsible not only for ensuring that the vessels would be constructed to meet the specifications but also for this being

done within the agreed time schedule. The Damen team transferred not only technical know-how on shipbuilding but also coached the local management on maintaining discipline and work ethics.

#### **4.1.4 Other Efficiency Issues**

With regard to the grant, the Ministry of National Development Planning (Bappenas) documents on the loan absorption status in the period of September 30, 2006 – December 31, 2009 indicate that absorption was 9 months behind schedule. Bappenas considered this delay to be tolerable. Damen and Dumas indicated that there were no significant delays in payments. Delays in grant absorptions and payments were mainly due to disbursement issues in the Treasury Office of the Ministry of Finance. The ORET grant disbursement was delayed only once during the period of the transaction in accordance with the pro rata disbursement approach of the grant and the non-grant funds.

## **4.2. Effectiveness**

At outcome level, the ORET transaction was expected to:

1. Improve maintenance of sea line marking;
2. Improve the use of aid vessels;
3. Transfer of shipbuilding technology and know-how to the local partner;
4. Training of the crews of the vessels;
5. Maintenance and delivery of spare-parts.

In the long-term, the transaction was expected to contribute to reducing accidents in the Indonesian sea lanes and enhancing the speed of ships in and the transport capacity of the sea lanes.

### **4.2.1 Availability of Aid vessels and Maintaining the Sea Line Marking**

During the handover ceremony of the first two vessels in May 2009, the Minister of Transportation stated that Indonesia as a maritime nation needs at least 120 navigational vessels to guarantee transportation safety at sea. At the time the Indonesian government only had 62 navigational vessels in operation of which 15 were considered obsolete. The replacement of one old buoy tender vessel and three old aid tender vessels improved the navigational capacity in Indonesia but was certainly not enough to reach the required navigational capacity.

The four vessels that were co-financed by the ORET transaction are regarded to be among the best navigational vessels in the country. Our respondents of the Ministry of Transportation stated that the vessels have greatly helped in maintaining the sea line marking (navigational buoys). Nevertheless, since the unmet need for navigational vessels is still very large, sea line marking is up to now inadequately maintained. Accidents such as coral reef hitting and collisions still occur due to an insufficient number or unmaintained navigational buoys. Unfortunately, there is no well-defined evaluation data available to assess whether the new navigational vessels have improved the sea line marking maintenance. Even with adequate data it would virtually be impossible to attribute improvements to this particular ORET-financed transaction because of the counterfactual issues discussed above.

### **4.2.2 Improve the Use of the Aid Vessels**

Since the four new vessels replaced four old ones, there is no significant difference in the use of aid vessels after the transaction. The new vessels have been used for the same purposes as the old ones, i.e. placing, maintaining, and replacing navigational buoys plus conducting some additional duties such as transporting lighthouse officers, and any other tasks occasionally assigned by the government, such as evacuating sea accident victims, carrying out search and rescue missions and joining military exercises.

### **4.2.3 Are There Less Accidents at Sea?**

The National Transportation Safety Committee distinguishes three types of accidents at sea: sink, burn/explode and collide. It can safely be assumed that more and better navigational vessels can contribute to reducing collisions at sea. Data on accidents at sea in the period 2007 – 2013 shows that the number of ship collisions has been more or less stable over the past five years (see Table 2). However, it is premature to conclude that the transaction has not achieved its objective for the following reasons: (i) there still exists a large gap between the required number of navigational vessels and the actual number of vessels; (ii) maritime traffic in the Indonesian sea lanes has

increased considerably during the last decade; (iii) unpredictability of other factors such as human error and weather conditions that may cause collisions.

**Table 2: Accidents at Sea in Indonesia by Type, 2007-2013**

	Sink	Burn/explode	Collision	Total
2007	4	3	0	7
2008	2	3	0	5
2009	2	1	1	4
2010	1	1	3	5
2011	1	3	2	6
2012	0	2	2	4
2013	1	2	2	5

Source: National Transportation Safety Committee, Dec 2013

Unavailability of data on the permitted speed in and the transport capacity of Indonesian sea lanes has prevented further assessment of the transaction's impact in those areas.

#### 4.2.4 Transfer of Shipbuilding Technology and Know-how

Although Indonesia is a maritime country, the number of shipbuilding training institutions in the country is very limited. Consequently, the number and the quality of the workers in the industry are inadequate. For that reason, PT Dumas highly valued the training, the coaching and the transfer of technology provided by Damen. Throughout the process Dumas workers and technicians encountered not only the latest shipbuilding technology but were also trained in organised work ethic and attitude.

As a result, the confidence of potential clients in the ability of Dumas to produce high quality vessels and deliver them on time has increased considerably. This is reflected in an increasing number of orders since the transaction was finalised. Considering that shipbuilding is a labour intensive industry, this trend also resulted in increasing employment opportunities. Table 3 shows that the number of workers employed by Dumas has more than doubled from 2006 to 2014.

**Table 3: Number of Workers\* at P.T. Dumas Shipyard**

Year	Permanent Workers		Non-permanent Daily Paid	Total
	Monthly Paid	Daily Paid		
2006	145	39	21	205
2007	163	55	74	292
2008	181	48	156	385
2009	200	59	123	382
2010	194	56	90	340
2011	223	57	230	510
2012	226	76	256	558
2013	248	88	198	534
2014	244	94	183	521

Source: Human Resource Dept. P.T. Dumas Tanjung Perak Shipyard

\*) Subcontracted workers are not included

Following the ORET transaction, Damen continued its business relationship with Dumas. Facilitated by the favourable trade and investment policies in Indonesia that exempt the production of exportable goods from paying value-added taxes on imported raw materials (known as Kemudahan Impor untuk Tujuan Ekspor – KITE), Damen found it profitable to outsource some of its vessel production to Dumas. After the transaction, Dumas has produced the following vessels for Damen:

- Three units Cutter Suction Dredger;
- One unit Stan Tug;
- Two units Fast Crew Supply;
- Two units ASD Tug.

These vessels were exported to Nigeria, Curacao, Mexico, Libya and Singapore. The collaboration with Damen, however, ended in 2012, since Indonesia no longer exempts Damen from paying the value-added tax on the items imported from the Netherlands. According to Damen this made the outsourcing of shipbuilding to the Indonesian shipyard no longer profitable.



#### **4.2.5 Crew Training and Maintenance**

In terms of operating and maintaining the vessels, relevant crews and technicians had already been intensively trained by Damen as part of the contract. Our respondents highly appreciated this training and mentioned that it had helped them to handle the new ships optimally. As part of the transaction spare-parts have been made available thereby assuring that the ships are well maintained.

### **4.3. Sustainability**

#### **4.3.1 Financial**

Regarding financial sustainability, the Ministry of Transportation does not foresee a problem of maintaining the future operation of the vessels. In order to guarantee the operation of the vessels, the Ministry of Transportation includes the operational cost of the vessels in its annual budget proposal to the Ministry of Finance. So far, there is no specific source of government revenue dedicated to finance the maintenance costs (no earmark) but the annual allocation forms a regular part of the Government's recurrent budget. There is no indication that this annual allocation would not be adequate. On the contrary, the respondents at the Ministry of Finance stated that there will not be a problem with the financing of maintenance.

#### **4.3.2 Maintenance**

Our respondents affirmed that they have not encountered a problem finding appropriate spare-parts for the vessels because of the technical and business collaboration between Damen and PT Dumas in Surabaya. Moreover, the after-sales service of Damen is well-organised and therefore the provision of spare-parts is not considered to be a problem.

#### **4.3.3 Institutional**

The Directorate General of Sea Communication of the Ministry of Communications of Indonesia (DGSC) is responsible for the 'Aid to Navigation' system in Indonesia. This Directorate is well managed and has a good overview of what is needed. It has delegated the execution of the navigational tasks to 21 regional units spread over the country. Four of these units are responsible for operating the vessels provided with this transaction. There are no indications that this is done inadequately.

#### **4.3.4 Environment**

The new vessels have been built using the most recent technology, resulting in them being more fuel efficient and less polluting than the vessels they replaced. Regrettably, no information is available on fuel savings or other environmental indicators. The agreement with the Indonesian government required the old ships to be scrapped in an environmentally safe way. According to the information from the client, this has indeed been done.

### **4.4. Relevance, Additionality and Policy Coherence**

#### **4.4.1 Relevance**

All Indonesian government programs and projects that are financed by external loans and grants fit into Indonesia's objectives as formulated in the medium-term development plan. The provision of additional navigation vessels was in fact on the List of Medium-Term Planned External Loans and Grants (DRPHLN-JM) or the so-called the Blue Book, a formal document issued by the Government of Indonesia; this confirms the relevance of the transaction.

#### **4.4.2 Additionality**

According to the Ministry of Transportation, the ORET grant was not the only source of financing available to the Ministry of Transportation to obtain these critically needed navigational vessels. In fact, at the time of the application several alternatives were available as a source of financing, such as soft loans from Japan, China and Denmark. Yet, the ORET programme was considered to be the most beneficial for Indonesia, not only because of size and concessionality of the ORET grant. For example, although the soft loan from Japan had a very low interest rate, it did not include a comparable grant component. As a result the total costs of the vessels would have been twice the costs of the ships provided through this ORET co-funded transaction. Furthermore, the Japanese

company was not willing to assemble the ships in Indonesia. The fact that the Dutch company was willing and able to assemble the ships in Indonesia was considered a great advantage and decisive in the decision to choose the offer from the Netherlands.

What would the Ministry of Transportation have done if ORET funding would not have been available? Responding to this hypothetical question, the representatives of the Ministry of Transportation, Bappenas and the local Damen office mentioned that Indonesia would have bought the vessels anyway from another country that was also offering soft financing. At the time, they might have bought the vessels from Japan, and hence compromise on their demand of having the ships assembled in Indonesia.

#### ***4.4.3 Coherence***

The transaction also fitted well with the Netherlands' policies to strengthen the country's economic relationships with emerging markets. As one of the larger countries of South-East Asia, Indonesia is considered to be an important trade and investment partner. This transaction can be seen as an example of expanding the business relationship with this country, since it also resulted in follow-up activities in the shipbuilding sector

#### ***4.4.4 Other Effects***

The increase in the activities of the shipbuilding industry did also have a positive effect on the willingness of the financial sector to become more involved in this industry. Previously, national banks considered the shipbuilding industry to be a sector to be avoided because of the high default risks due to limited and unstable demand. That perspective, however, has been changing recently. Some national banks are now willing to finance shipbuilding activities in view of the growing demand from both local and foreign markets. Indonesian state companies are now also ordering ships from local shipyards, which gives local banks more confidence to lend to the local shipbuilding industry.

## Annexes

### Interviewees

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4. Mr. Yance Gunawan (President Director)  
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5. Ms. Ayu Sukorini (Director of Loan and Grant)  
Directorate General of Debt Management, Ministry of Finance  
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6. Ms. Ria Widiati  
Directorate of Bilateral Foreign Funding, Bappenas  
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## Sources of Information

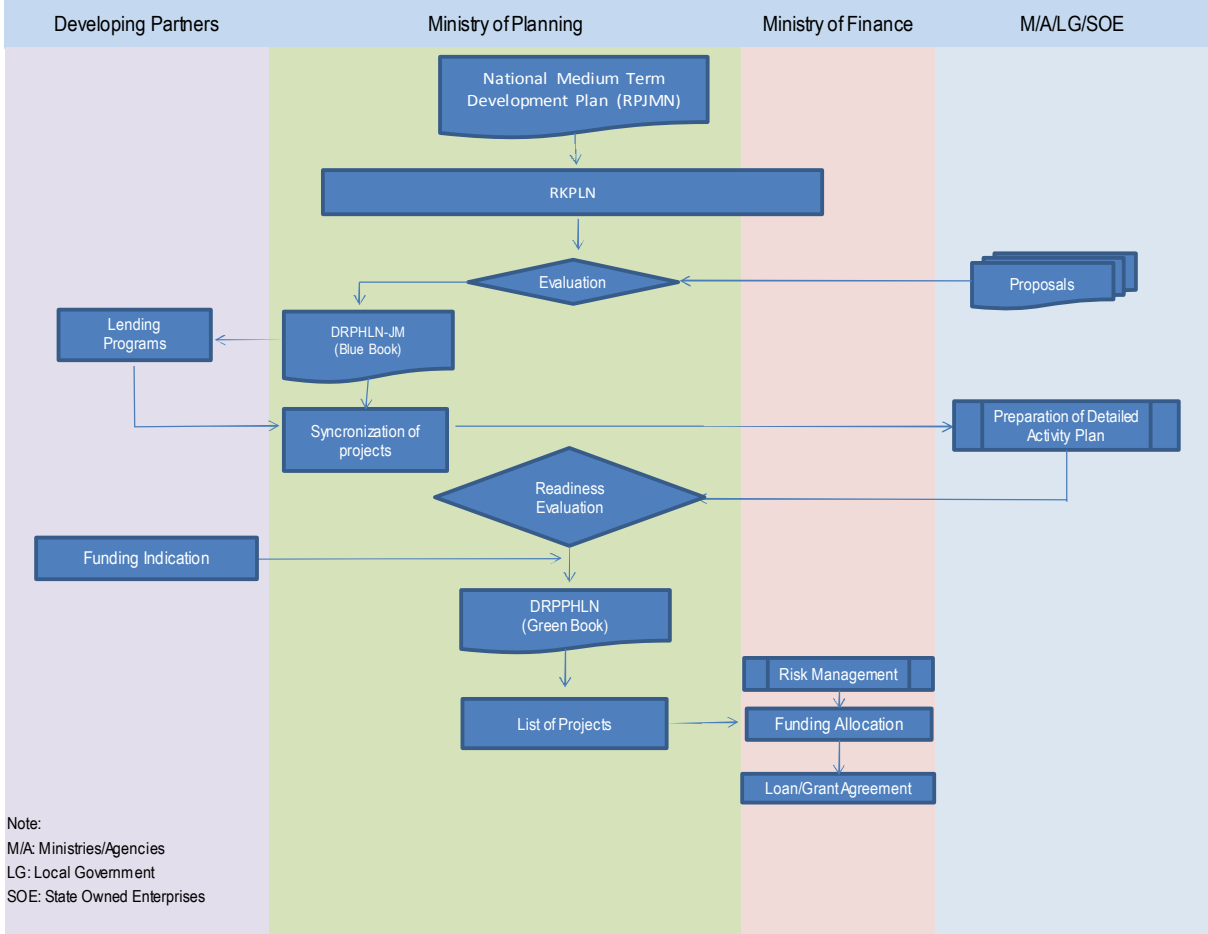
The evaluation is based on the following sources of information:

1. Contents of ORET archive (from the Netherlands):
2. Forecast of shipping traffic per sea lane in Indonesia, folder IMR ORET FILES, EUR Holding BV
3. Feasibly Study: the Japanese master plan referred to the project summary, light yellow folder (05/44D, not 05/44A), EUR Holding BV
4. Terms of Reference for ORET Evaluation
5. Dua Buah Kapal Bantuan Belanda Perkuat Armada Kapal NavigasiI Perhubungan, (2009, May 31). Retrieved May 14, 2014, from <http://kemhubri.dephub.go.id>
6. Departemen Perhubungan Dapat Kapal Navigasi dari Belanda, (2009, June 1), Retrieved May 14 2014, from <http://www.tempo.co/read/news/2009/06/01/>
7. Media Release KNKT Akhir tahun 2013, (2013, December 30), Retrived May 14th 2014, from <http://www.dephub.go.id/knkt>
8. Ministry of National Development Planning/National Development Planning Agency, List of Medium-Term Planned External Loans and Grants (DRPHLN-JM or Blue Book) 2011-2014, 1st Book, 2011
9. Ministry of National Development Planning/national Development Planning Agency, Status Penyerapan Dana dan Permasalahan Proyek-Proyek Pinjaman Belanda Tahun Anggaran 2006-2009, an External Loans Monitoring Document.
10. Ministry of National Development Planning/national Development Planning Agency, Tata Cara Pengajuan dan Pengelolaan bantuanTeknis, Presentation Materials, 2009
11. Government Regulation No. 2 year 2006 and Government Regulation No 10 year 2011 on the Mechanism of External Loans and Grants
12. Presidential Decree on Public Procurement in Indonesia no. 80/2003 and no. 70/2012

# The Procedure for Foreign Grants and Loans in Indonesia

After the 1998 financial crisis, the Government of Indonesia has adopted a very prudent fiscal policy and consequently aligned its policy on the use of foreign loans. The amount of external debts has been limited and their uses have to be in accordance with the national medium-term development plan. Based on the Ministry of National Development Planning/National Development Planning Agency, List of Medium-Term Planned External Loans and Grants (DRPHLN-JM or Blue Book) 2011-2014, 1st Book, the planning of external loan and grants follows the procedure shown in Figure 1 below (under the Government Regulation No 2 year 2006 and No. 10 year 2011). To be able to use external sources of financing, the minister, the head of government agencies, the head of local governments and the President-Director of SOEs, should first submit the proposals to the National Planning Agency (Bappenas). Then Bappenas assesses the feasibility of the funding proposals on the basis of their relevance for the national development priorities reflected in the medium-term national development plan (Rencana Pembangunan Jangka Menengah Nasional-RPJMN) and the external loans needs plan (Rencana Kebutuhan PinjamanLuarnegeri—RKPLN). RPJMN and RKPLN are formal documents of the Government of Indonesia that are issued every five years. Proposals meeting the qualification criteria will be included in the List of Medium-Term Planned External Loans and Grants (Daftar Rencana Pinjaman dan Hibah Luar Negeri Jangka Menengah--DRPHLN-JM) or Blue Book. Development partners are expected to refer to the Blue Book in their financing plans. During the process of project preparation, the Government of Indonesia annually assesses the readiness of the project proposals. Projects that meet the readiness criteria and have received a funding indication from development partners, will be listed in the Priority List of Planned External Loans and Grants (Daftar Rencana Pemanfaatan Pinjaman Luar Negeri—DRPPLN) or the Green Book. The projects considered to be ready for implementation, will be submitted to the Ministry of Finance to negotiate the funding arrangements with the respective development partners.

**Figure 1: Planning Mechanism of External Loan and/or Grants**



Source: Ministry of National Development/National Development Planning Agency, "List of Medium-Term Planned External Loans and Grants (DRPHLN-JM) 2011-2014; 1<sup>st</sup> Book"