CONNECT2SMALLPORTS:

SOUTH BALTIC SMALL PORTS – GATEWAY TO INTEGRATED SUSTAINABLE EUROPEAN TRANSPORT SYSTEM

Business Breakfast - Blue Science Park
17th OCT 2019 - Karlskrona, Sweden

Mahwish Anwar
Licentiate Candidate, Blekinge Institute of Technology
Mahwish Anwar
Licentiate Candidate, Computer Science
Blekinge Institute of Technology

Researcher, Connect2SmallPorts Project

https://www.linkedin.com/in/mahwishanwar/
OUTCOMES
OF THIS PRESENTATION

▪ Introduce you to Connect2SmallPorts project
▪ Brief you on project activities
▪ Share with you the project results / My research
▪ Share collaboration opportunities
**Objectives**

Improving cross-border connectivity for a functional blue and green transport area

**Duration**

36 months. Start – 01.07.2018 - End – 30.06.2021

**Budget**

Project budget – approx. 2.1 million EURO

[https://southbaltic.eu/areas](https://southbaltic.eu/areas), [https://southbaltic.eu/-/connect-2-small-ports](https://southbaltic.eu/-/connect-2-small-ports)
GEOGRAPHIC PROXIMITY

https://southbaltic.eu/eligible-area
WHAT IS A SMALL PORT?

- Within TEN-T network as comprehensive ports / outside TEN-T network
- Not handling > 10 MT of goods for at least one year between 1997 - 2008; Or Not embarking/disembarking > 100 000 passengers for at least one year between 1997 - 2008
- Other criterion (scientific research)
  - Port size, Hinterland capture area
  - Market share, Gross Domestic Product (GDP) of the port city
  - Relative cluster position, Connectivity with other ports
  - Logistics and distribution function

SMALL PORTS IN TEN-T

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WHY STRENGTHEN SMALL PORTS?

- They are weak
- Competitive and operational pressures from the comprehensive TEN-T Network
- Regional development
- Respond to the growth prediction upto 327% by 2050.
I. Digital Audit

II. Blockchain/IoT Design Strategy

III. Blockchain/IoT Implementation Strategy

IV. Matchmaking + Knowledge transfer
PROJECT DELIVERABLE: DIGITAL AUDIT TOOL

https://connect2smallports.eu/digital-auditing/
# Project Deliverable: Digital Audit Tool


Mahwish Anwar

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**Auditing Calendar**

<table>
<thead>
<tr>
<th>Month</th>
<th>Port 1</th>
<th>Port 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>Seaport of Wismar (PP6)</td>
<td>Rostock Freight and Fishing Port</td>
</tr>
<tr>
<td>June</td>
<td>Seaport of Stralsund (AP4)</td>
<td>Port of Vierow (AP6)</td>
</tr>
<tr>
<td>July</td>
<td>Port of Karlskrona (FP9)</td>
<td>Port of Karlshamn</td>
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<tr>
<td>August</td>
<td>Port of Klaipeda (PP8)</td>
<td>Port of Lubmin</td>
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<td>September</td>
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<tr>
<td>October</td>
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<tr>
<td>November</td>
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<td></td>
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<tr>
<td>December</td>
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</tbody>
</table>

Additional Ports

[https://connect2smallports.eu/digital-auditing/](https://connect2smallports.eu/digital-auditing/)
Call for participation

- The partners of project – Connect2SmallPorts – which is financed by Interreg South Baltic programme – are seeking more small and medium-sized ports to participate in the digital auditing.

https://connect2smallports.eu/digital-auditing/
## PROJECT DELIVERABLE: DESIGN STRATEGY

<table>
<thead>
<tr>
<th>Method</th>
<th>Objective</th>
<th>Related Questions</th>
<th>Input</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blockchain Literature Review</td>
<td>Qualitative analysis on current understanding on the topic of Blockchain and application to ports</td>
<td>What research has been published and what gaps exist in our understanding.</td>
<td>Survey of published peer reviewed scientific literature.</td>
<td>Theoretical Foundation.</td>
</tr>
<tr>
<td>Port Interview &amp; Blockchain Questionnaire</td>
<td>Qualitative and Quantitative methods for obtaining direct and up-to-date information</td>
<td>Clarification and Confirmation with experts from the domain.</td>
<td>Semi-structured interviews and questionnaire for eliciting empirical data.</td>
<td>What are the impacts of Blockchain?</td>
</tr>
<tr>
<td>Port Business Case Evaluation</td>
<td>Design and testing the impact of Blockchain on port flows</td>
<td>What are the potential use cases for using Blockchain in ports and what are the KPIs to use for evaluation?</td>
<td>Review of (a) literature survey and (b) interview and questionnaire in developing the cases.</td>
<td>A number of use cases are identified in using Blockchain.</td>
</tr>
<tr>
<td>SWOT Analysis</td>
<td>Evaluation of the port business model components and Blockchain’s impact on them.</td>
<td>What is the current port business model and how can it be adapted for Blockchain implementation?</td>
<td>Validation of Business Case Evaluation by domain experts on use cases.</td>
<td>Port business cases are identified and tested for accuracy and practicality.</td>
</tr>
</tbody>
</table>

PROJECT DELIVERABLE: DESIGN STRATEGY

State-of-the-art of Blockchain in Terminals - Results

PROJECT DELIVERABLE: DESIGN STRATEGY

State-of-the-practice of Blockchain in Terminals

27 questions.
10 Minutes.

https://www.surveymonkey.com/r/BlockchainForPorts

https://connect2smallports.eu/blockchain-and-iot-strategy/
PROJECT DELIVERABLE: DESIGN STRATEGY

State-of-the-practice of Blockchain in Port / Terminals - Results

Which one of the following, if any, do you believe is the most significant advantage of blockchain over existing systems when thinking of your specific industry?

<table>
<thead>
<tr>
<th>14. Greater speed compared to existing systems</th>
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<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Somewhat yes</td>
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<tr>
<td>Indifferent</td>
</tr>
<tr>
<td>Somewhat no</td>
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<tr>
<td>No</td>
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</tbody>
</table>

15. Maintaining current customer and supplier relationships.

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<tbody>
<tr>
<td>Yes</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat yes</td>
<td>67%</td>
</tr>
<tr>
<td>Indifferent</td>
<td>11%</td>
</tr>
<tr>
<td>Somewhat no</td>
<td>22%</td>
</tr>
<tr>
<td>No</td>
<td>0%</td>
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</tbody>
</table>

16. New business models and revenue sources

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<tr>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>45%</td>
</tr>
<tr>
<td>Somewhat yes</td>
<td>33%</td>
</tr>
<tr>
<td>Indifferent</td>
<td>11%</td>
</tr>
<tr>
<td>Somewhat no</td>
<td>11%</td>
</tr>
<tr>
<td>No</td>
<td>0%</td>
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</tbody>
</table>

https://connect2smallports.eu/blockchain-and-iot-strategy/
Call for participation

- The partners of project – Connect2SmallPorts – which is financed by Interreg South Baltic programme – are seeking more small and medium-sized ports to participate in the sharing information on Blockchain state-of-the-practice.

https://www.surveymonkey.com/r/BlockchainForPorts

https://connect2smallports.eu/blockchain-and-iot-strategy/
Conceptual study: Article presents that Blockchain possesses characteristics suitable to mitigate the risks and issues pertaining to the paper-based Bill of Lading process in the light of scientific work.

Call for participation

- The partners of project – Connect2SmallPorts – which is financed by Interreg South Baltic programme – are seeking to collaborate with more small and medium-sized ports to participate in the project pilots.

https://connect2smallports.eu/blockchain-and-iot-strategy/
REVISITING CONCEPTUAL MODEL

I. Digital Audit
II. Blockchain/IoT Design Strategy
III. Blockchain/IoT Implementation Strategy
IV. Matchmaking + Knowledge transfer

Mahwish Anwar
About the Project

https://connect2smallports.eu/


Mahwish Anwar
mahwish.anwar@bth.se
0046 76 850 3859
https://connect2smallports.eu


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