Panel discussion 4: Paving the way to Green Customs: what can Customs do or will have to do?

Green Customs Framework and Cases (PEN-CP Annual Study) and Extended Data Pipeline for Circular Economy Monitoring

Presenters:

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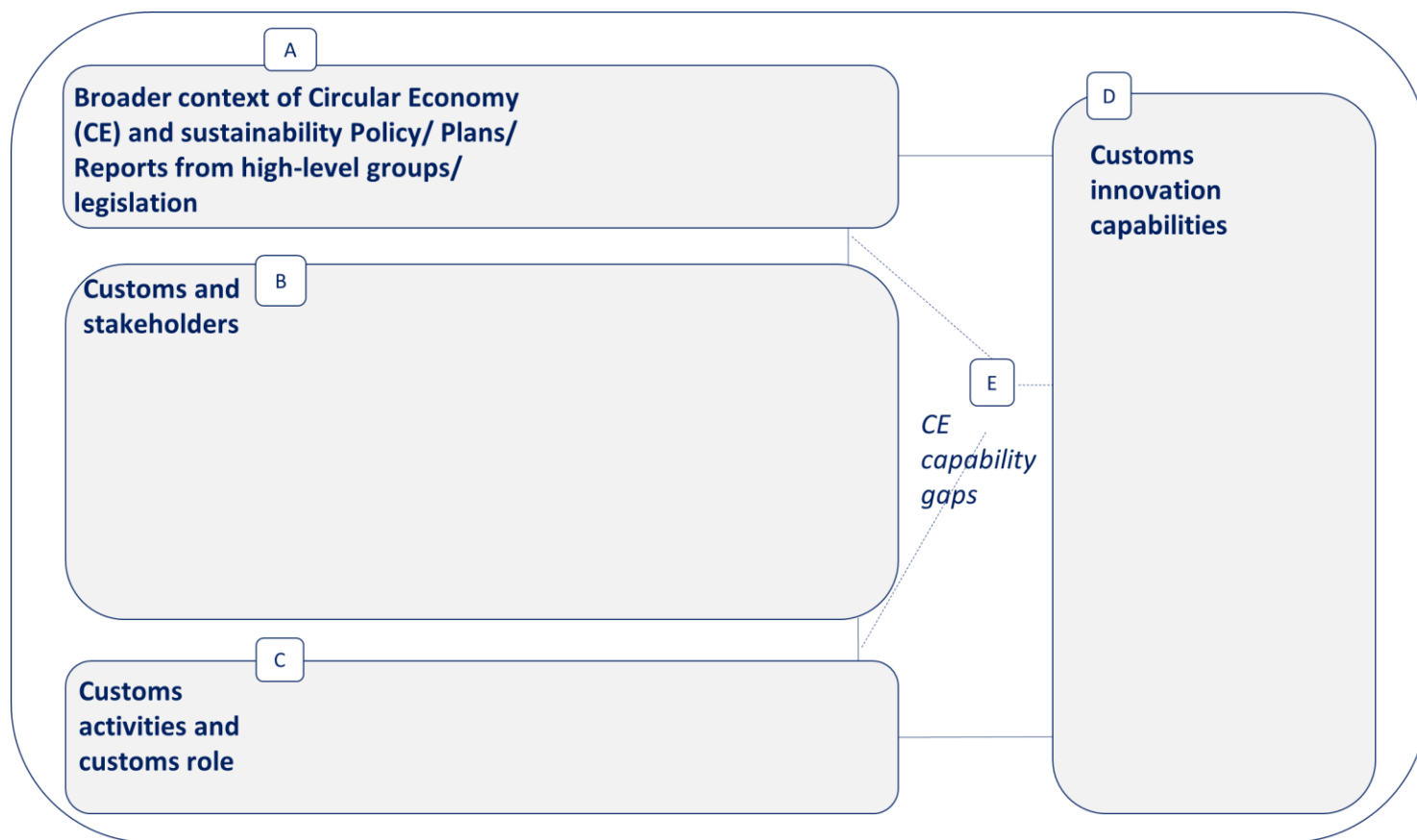
WCO Green Customs Global Conference, 27-28 June 2022, Brussels, Belgium

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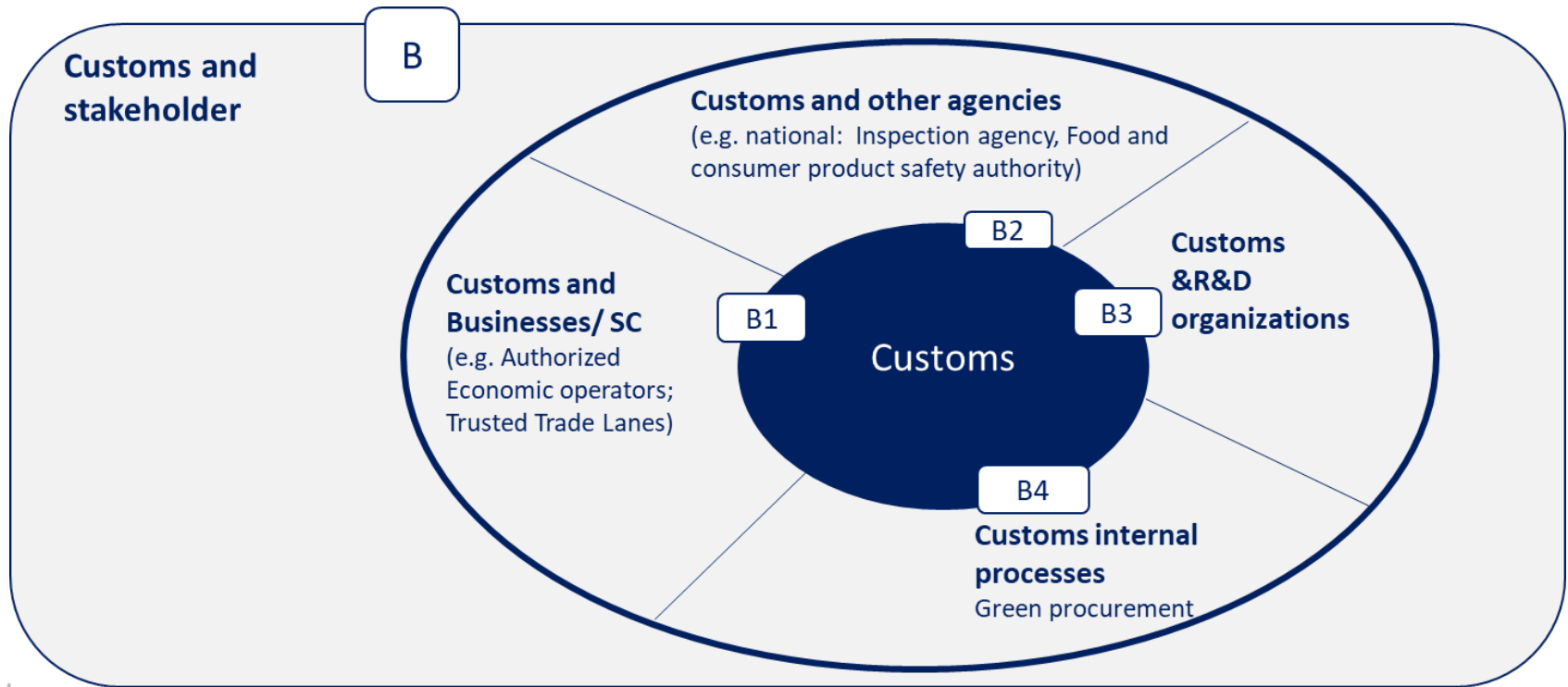Pan-European Network of
Customs Practitioners
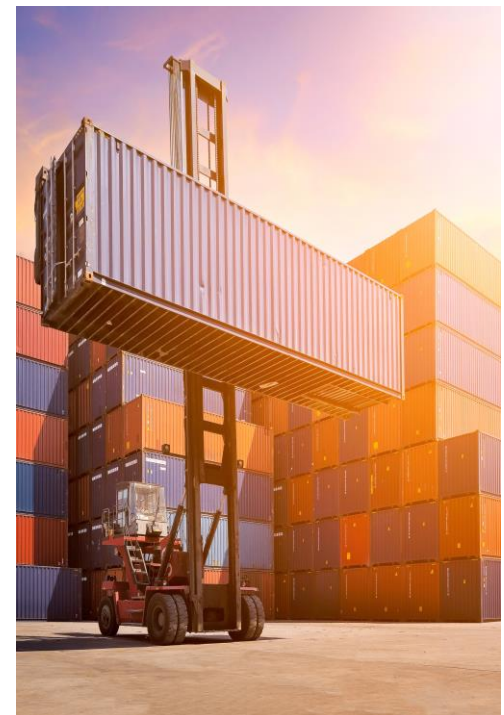
Green Customs High-Level Framework: Overview

Rukanova, B. Männistö, T., Tan, Y., Slegt, M., Heijmann, F. (2022). A High-Level Framework for Green Customs and Research Agenda. In DG.O 2022: The 23rd Annual International Conference on Digital Government Research (dg.o 2022), June 15–17, 2022, Virtual Event, Republic of Korea. ACM, New York, NY, USA. https://doi.org/10.1145/3543434.3543660
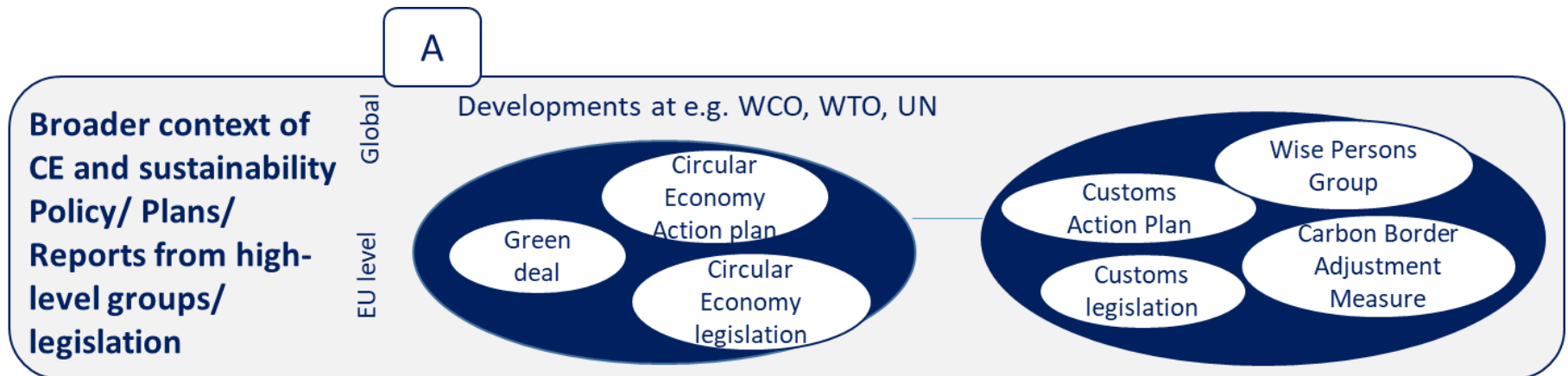
Customs Stakeholders

Rukanova, B. Männistö, T., Tan, Y., Slegt, M., Heijmann, F. (2022). A High-Level Framework for Green Customs and Research Agenda. In DG.O 2022: The 23rd Annual International Conference on Digital Government Research (dg.o 2022), June 15–17, 2022, Virtual Event, Republic of Korea. ACM, New York, NY, USA. https://doi.org/10.1145/3543434.3543660

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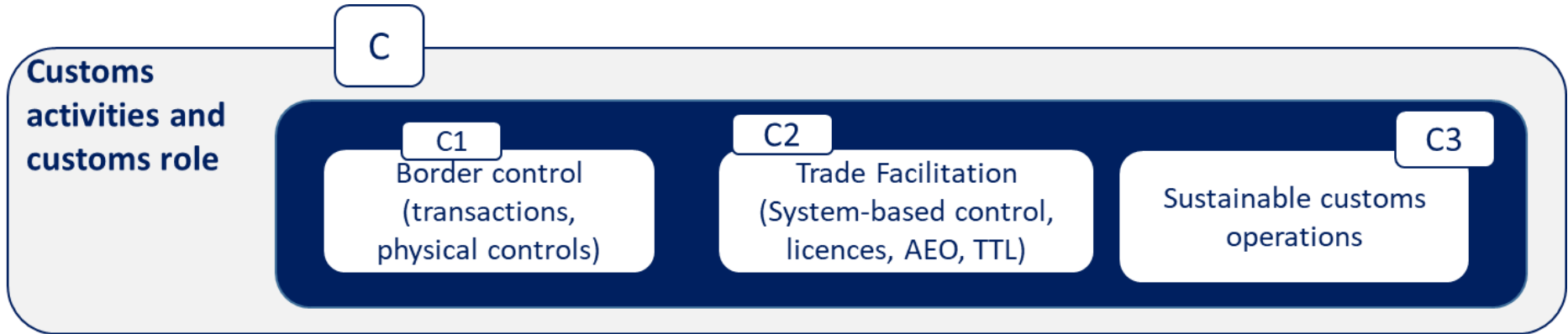Pan-European Network of
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Broader Context

Rukanova, B. Männistö, T., Tan, Y., Slegt, M., Heijmann, F. (2022). A High-Level Framework for Green Customs and Research Agenda. In DG.O 2022: The 23rd Annual International Conference on Digital Government Research (dg.o 2022), June 15–17, 2022, Virtual Event, Republic of Korea. ACM, New York, NY, USA. https://doi.org/10.1145/3543434.3543660

Customs Activities

Customs activities and customs role

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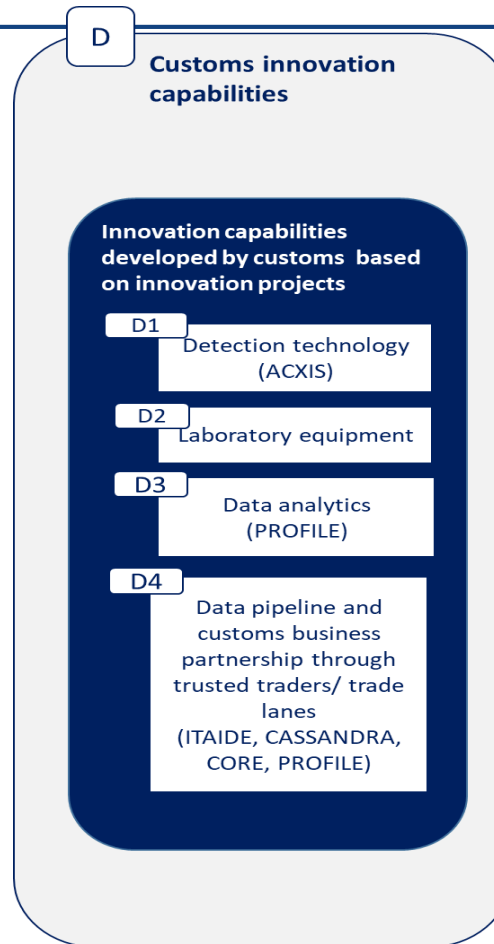| C1	C2	C3
Border control (transactions, physical controls)	Trade Facilitation (System-based control, licences, AEO, TTL)	Sustainable customs operations

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Customs Innovation Capabilities

D — Customs innovation capabilities

Innovation capabilities developed by customs based on innovation projects

- **D1** Detection technology (ACXIS)
- **D2** Laboratory equipment
- **D3** Data analytics (PROFILE)
- **D4** Data pipeline and customs business partnership through trusted traders/ trade lanes (ITAIDE, CASSANDRA, CORE, PROFILE)
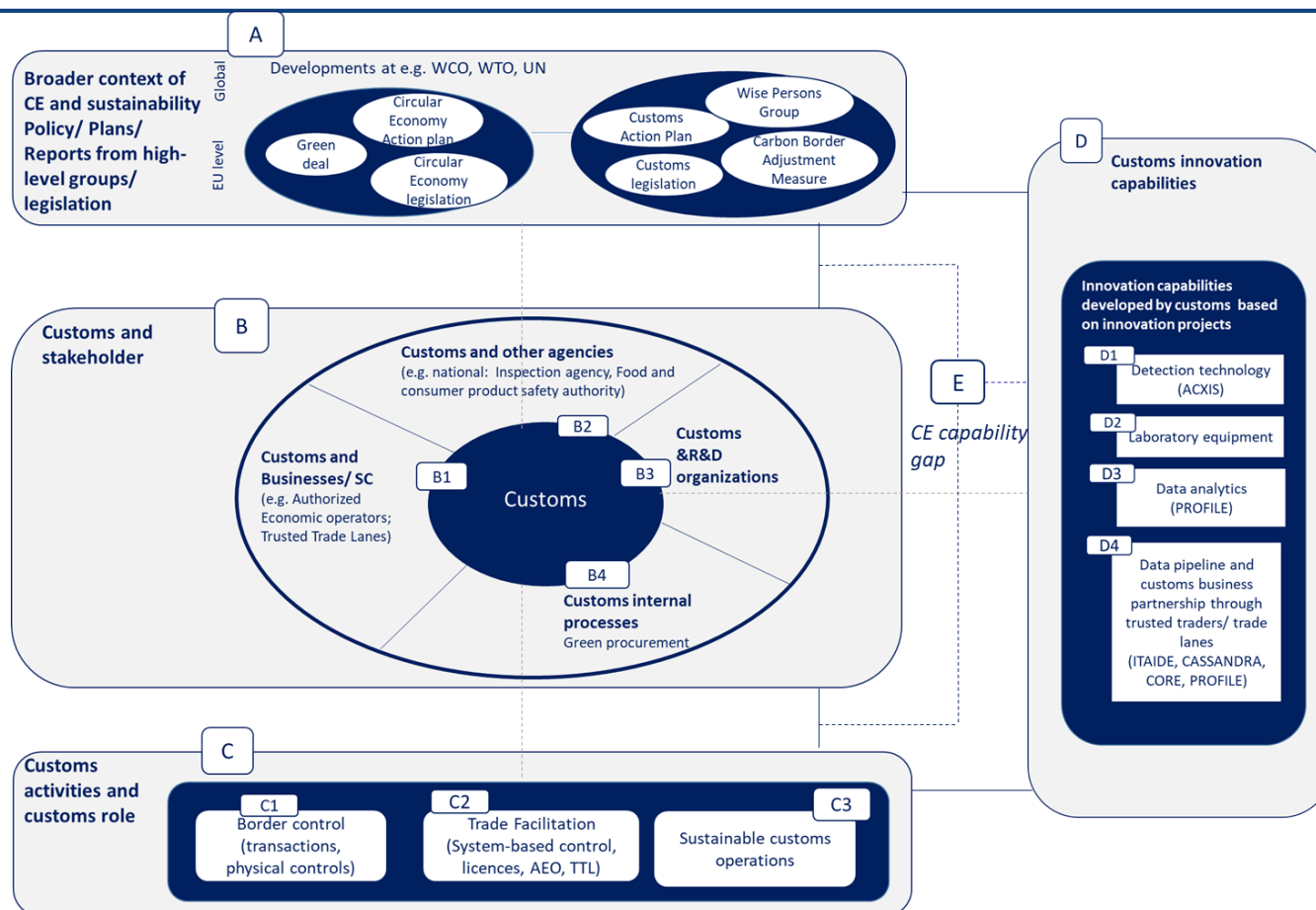
Rukanova, B. Männistö, T., Tan, Y., Slegt, M., Heijmann, F. (2022). A High-Level Framework for Green Customs and Research Agenda. In DG.O 2022: The 23rd Annual International Conference on Digital Government Research (dg.o 2022), June 15–17, 2022, Virtual Event, Republic of Korea. ACM, New York, NY, USA. https://doi.org/10.1145/3543434.3543660

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Green Customs High-Level Framework

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Customs activities: Initial Cases

- **Goal of the cases:** to collect current practices in Customs that link in some way to sustainability aspects
- **Initial cases identification:** searches of the WCO News archives and experts interviews
- **Interested also in new cases**

Border control to introduce trade rules for environmentally sensitive goods	Trade facilitation to enable sustainable cross-border logistics	Sustainable customs operations to reduce own environmental footprint
The Philippines • How to encounter illicit trade in hazardous waste **China** • Innovations for improve enforcement of waste trafficking	**Dubai** • Virtual Freight & Logistics Corridor streamlines cargo movement **Green AEO** • No cases identified yet	**The Netherlands:** • Handling obsolete NII equipment **Ireland** • Greening and energy efficiency of vehicles and customs operations **Jordan** • Customs renewable energy

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Customs innovation capabilities: Extended Data Pipeline for Circular Economy Monitoring

Visibility at the border
-certificates (e.g. UTZ, FSC), digital product passport, chemical composition, goods provenance
-Detection technology and Lab equipment

③

①

Visibility in the production process (materials, production method etc.)

②

Visibility in the processes of recycle, refurbish, reuse

Conceptualization of the data pipeline (by David Hesketh and Frank Heijmann)
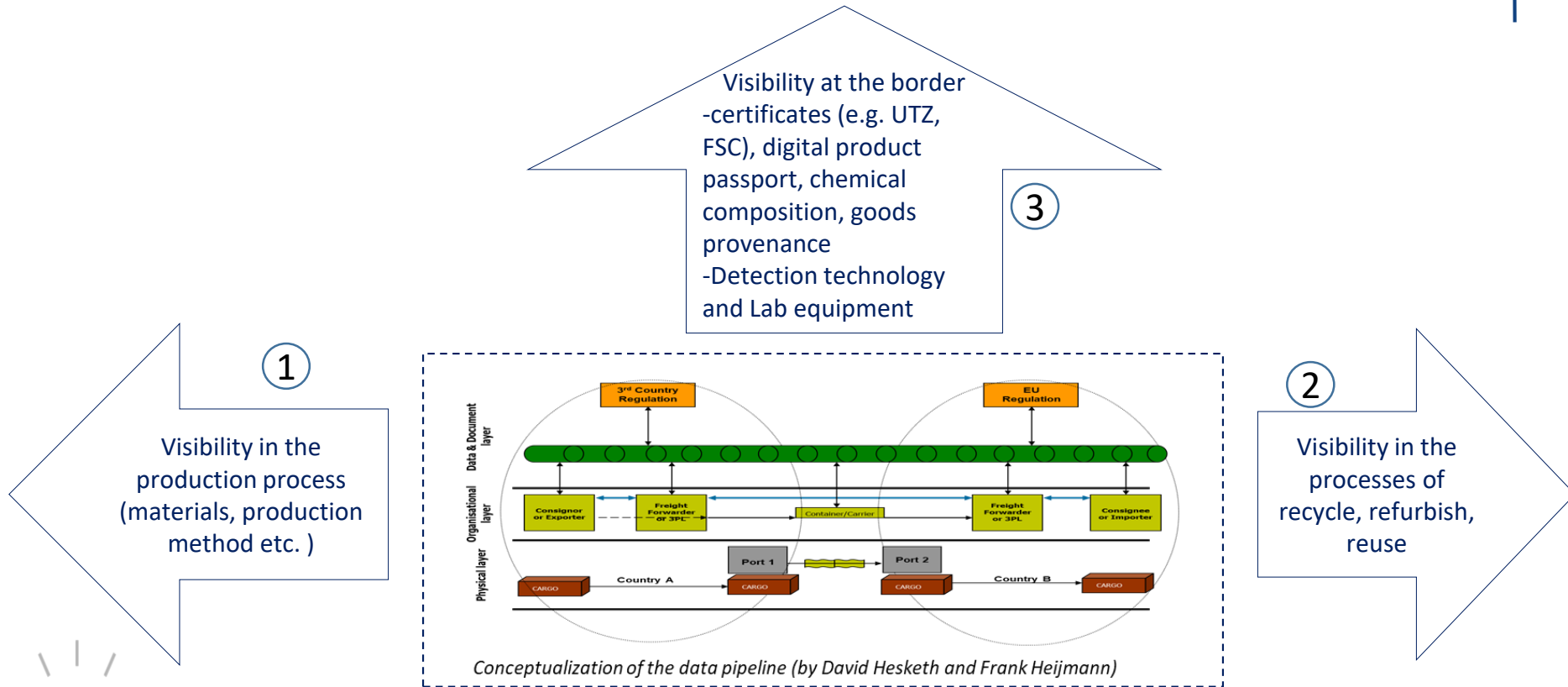
Hesketh, D. (2010). Weaknesses in the supply chain: who packed the box. World Customs Journal, 4(2), 3–20.
van Stijn, E., Klievink, B., Janssen, M., & Tan, Y. (2012). Enhancing business and government interactions in global trade. CESUN 2012. Delft: Delft University of Technology.
Rukanova, B. D., Tan, Y., Hamerlinck, R., Heijmann, F., & Ubacht, J. (2021). Extended Data Pipeline for Circular Economy Monitoring. Proceedings of the 22nd Annual International Conference on Digital Government Research: Digital Innovations for Public Values: Inclusive Collaboration and Community, DGO 2021 (pp. 551-553).
Rukanova, B. D., Tan, Y., Hamerlinck, R., Heijmann, F., & Ubacht, J. (2021). Digital Infrastructures for Governance of Circular Economy: A Research Agenda. In EGOV2021 – IFIP EGOV-CeDEM-EPART 2021 Digital Government Society

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Customs is already differentiating products for sustainability purposes: more differentiation may be needed in the future

Extending current customs innovations for the context of Green customs

- **Verification** of declarations using data out of the **(extended) data pipeline**
  - Extend data pipeline to contain elementary production data, certificates and licenses
  - Enable administrations to make (automated) use of pipeline data in verification

- **Inspection** using **technology** to discern a sustainable from a non-sustainable product
  - Expand the scope of existing **mobile detection technology** (e.g. infrared spectroscopy, **RAMAN**)
  - Develop **field ready applications** of laboratory technologies
  - Develop **faster (standard) methods** of laboratory analysis
  - Develop identifying **non-intrusive inspection technologies**

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Green Customs and a Landscape for Further Action
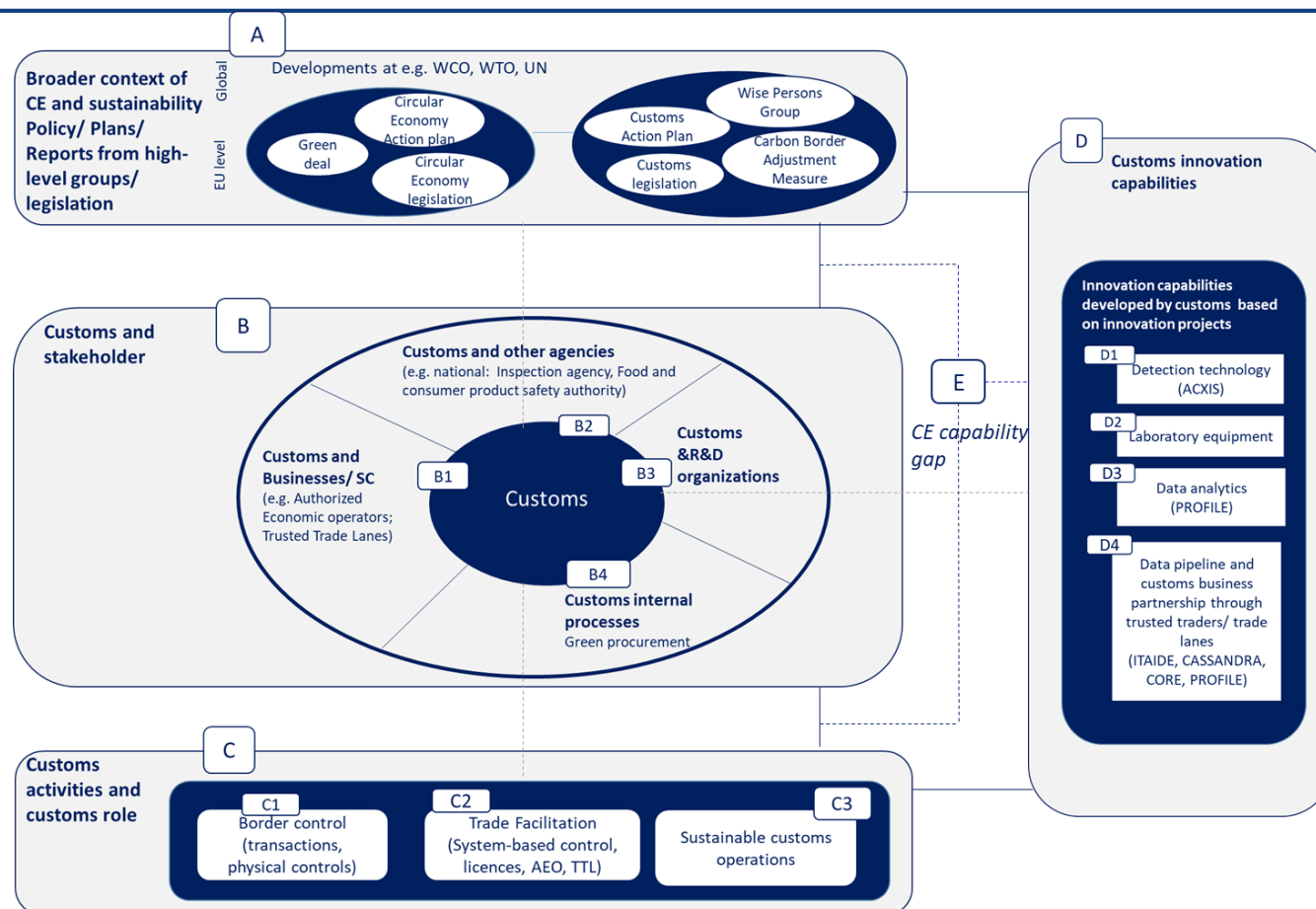
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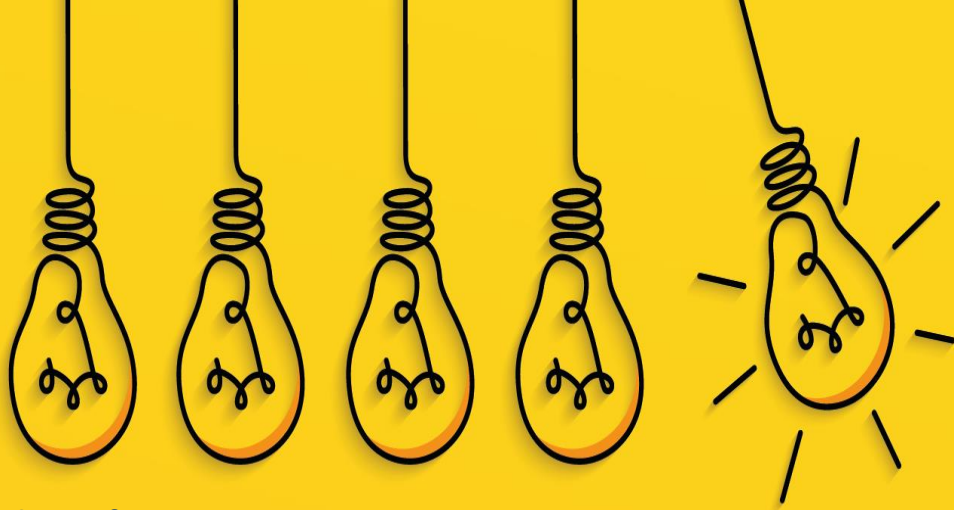
Further information

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PEN-CP project: https://www.pen-cp.net/

WCO News Issue 88 (Feb.2019):

https://mag.wcoomd.org/magazine/wco-news-88/the-pen-cp-project

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