The Maritime Integrated Decision Support Information System on Transport of Chemical Substances
MIDSIS TROCS 4.0

MEDEXPOL2020, 27-28 October 2020

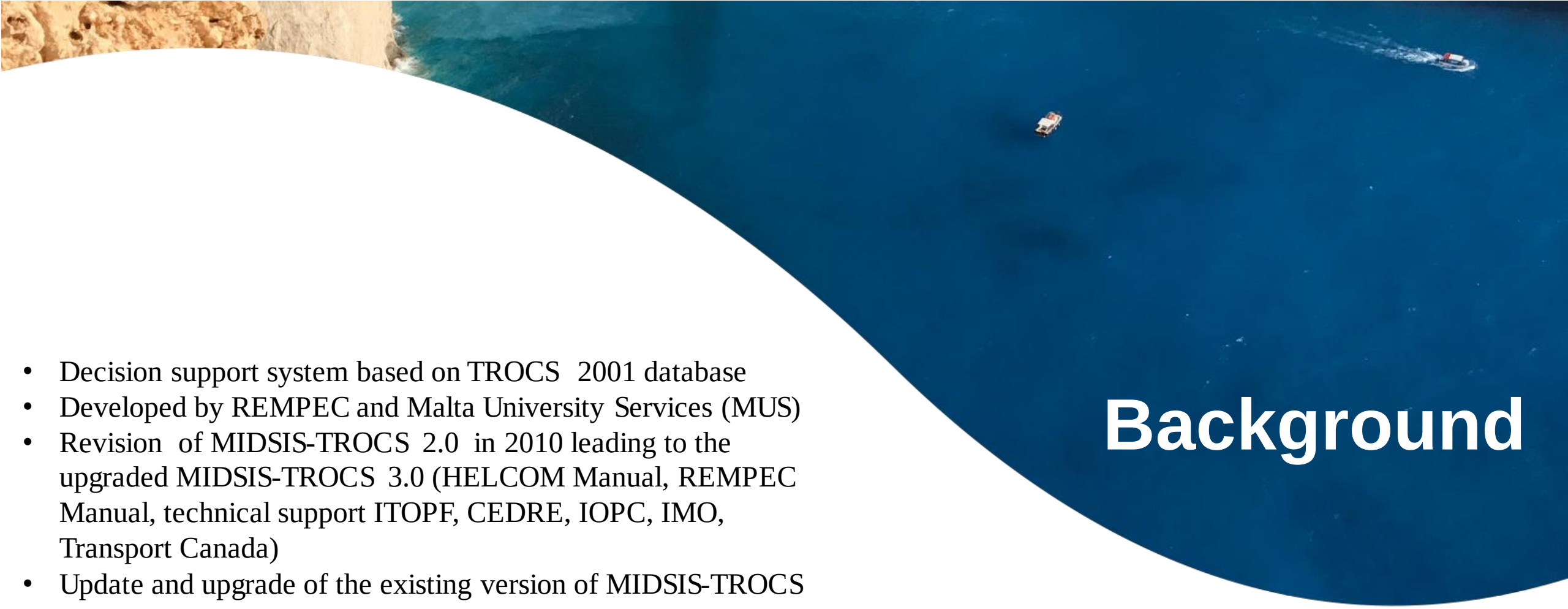
UN environment programme

Mediterranean Action Plan
Barcelona Convention

REMPEC

IMO INTERNATIONAL MARITIME ORGANIZATION

WEST Mediterranean Marine Oil & HNS Pollution Cooperation



Background

- Decision support system based on TROCS 2001 database
- Developed by REMPEC and Malta University Services (MUS)
- Revision of MIDSIS-TROCS 2.0 in 2010 leading to the upgraded MIDSIS-TROCS 3.0 (HELCOM Manual, REMPEC Manual, technical support ITOPF, CEDRE, IOPC, IMO, Transport Canada)
- Update and upgrade of the existing version of MIDSIS-TROCS 3.0 to create MIDSIS-TROCS 4.0

Objectives

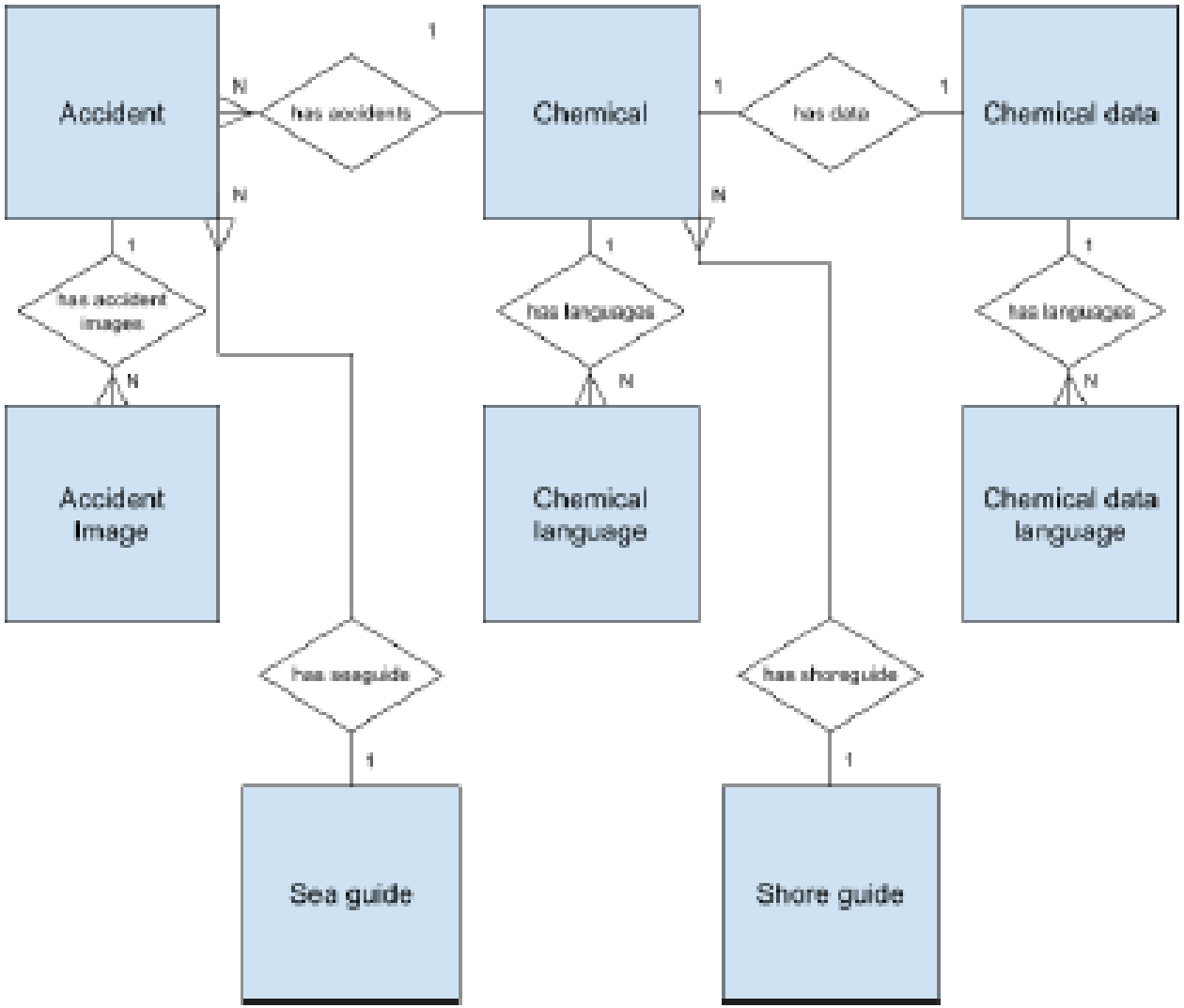
- Free and publicly available
- Facilitate decision making in case of Chemical spill
- Provide a tool to first responders primarily for their safety and to take well-informed decision
- Access to decisions trees features with concise information and action sheets
- Provide updated information on chemical characteristics and reactivity, GESAMP Profiles, shoreline and at sea response guide, and more
- Integrate in a comprehensive tool data on the main transported chemicals
- Share lessons learnt from previous chemical spills, through reports

MIDSIS TROCS 3.0 Data structure

- The database of the version 3 of the application was a derby database ➔relational database.

Focus on the following contents

- Accident
- Accident image
- Chemical data
- Chemical
- Chemical language
- Shore guide
- Sea guide



Project Proposal

- A **free and publicly available** decision support tool accessible by **any responders, anywhere with or without internet**
- Maintain existing chemical database structure and migrate MIDSIS-TROCS 3.0 database to the uptdate opensource technology (Plone) used for REMPEC's webiste
- Fusion MIDSIS-TROCS 3.0 and HNS-MS database
- Update chemical database and relevant emergency guides in cooperation with IMO, REMPEC, Cedre, the Royal Belgian Institute of Natural Sciences, Transport Canada
- Update accident database (Cedre, ITOPF, Countries…)
- Integration of the "**Inter-regional HNS Response Manual"** into MIDSIS-TROCS 4.0 in the **upgraded decision support trees feature**

- **Online access | Offline desktop App | Mobile App**
- **Reduce maintenance cost**
- **Capitalization of DG-ECHO projects**

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MIDSIS TROCS 4.0
Data structure

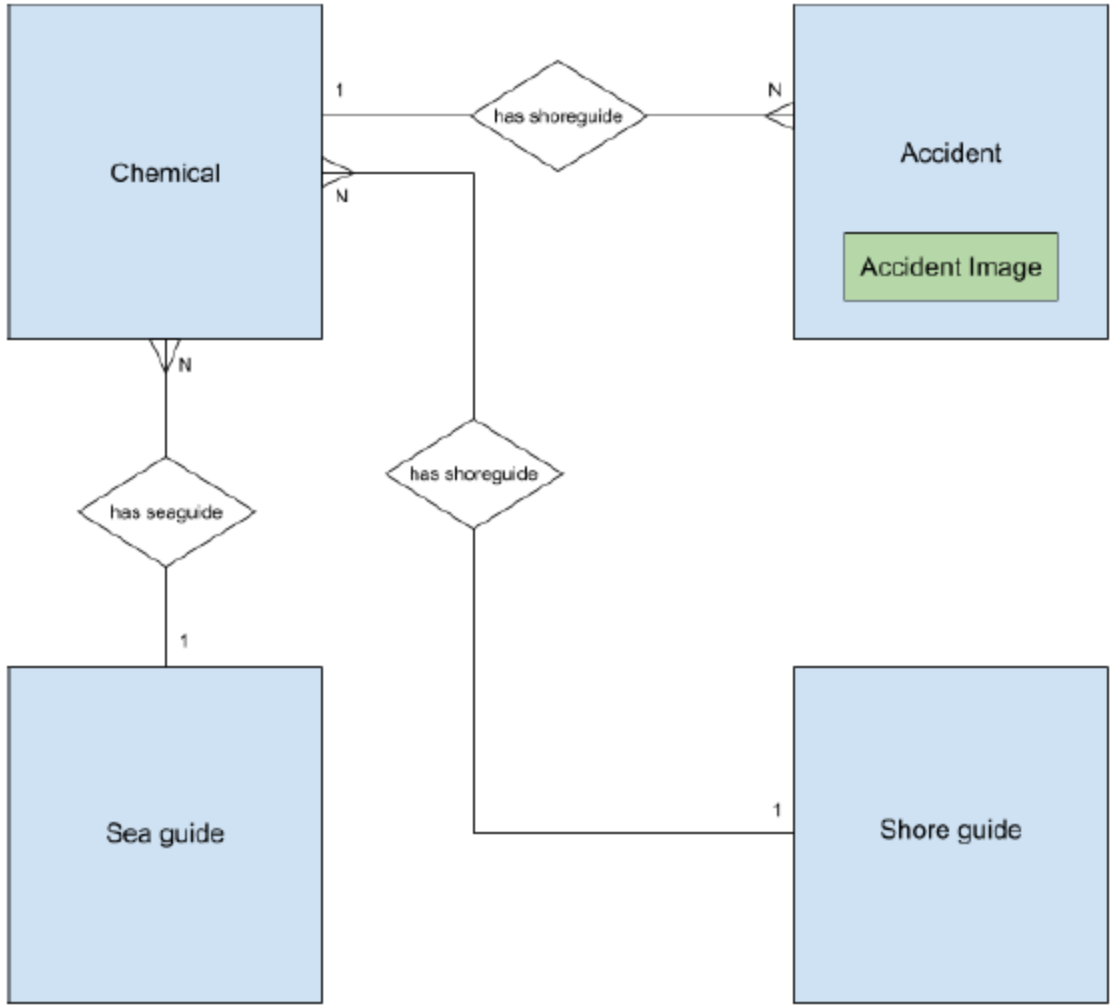
Data migrated in them ZOBS database and manages with the following contents

- Accident
- Accident image
- Chemical
- Sea Guide
- Shore guide

More parameters will be added:

- physical chemical(density, surface tension, viscosity, hydrosolubility, vapor pressure, etc)

- sea behaviours (biodegradation) ➔given for temperature and nonstandard salinity.



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