



# VIII CLGE Conference of the European Surveyor “BLUE SURVEYING”

## Responding to flood emergencies at river dykes

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Sevilla (Spain) 27th October 2022 Hotel Barceló Sevilla Renacimiento





# River Elbe southeast from Hamburg





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From 2002 to 2013 4 one hundred year flood events at the river Elbe  
In the future areas in the Netherlands, Danmark, UK, Germany etc will be in trouble

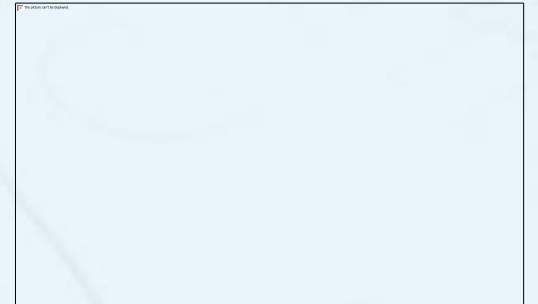




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# Flood

Measuring the  
"wave"





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Measuring the dyke lines and introducing a kilometre post





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# Profiles





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## General map





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How can data and information be managed better?







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**Digital dyke book**





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# Application for IOS and Android





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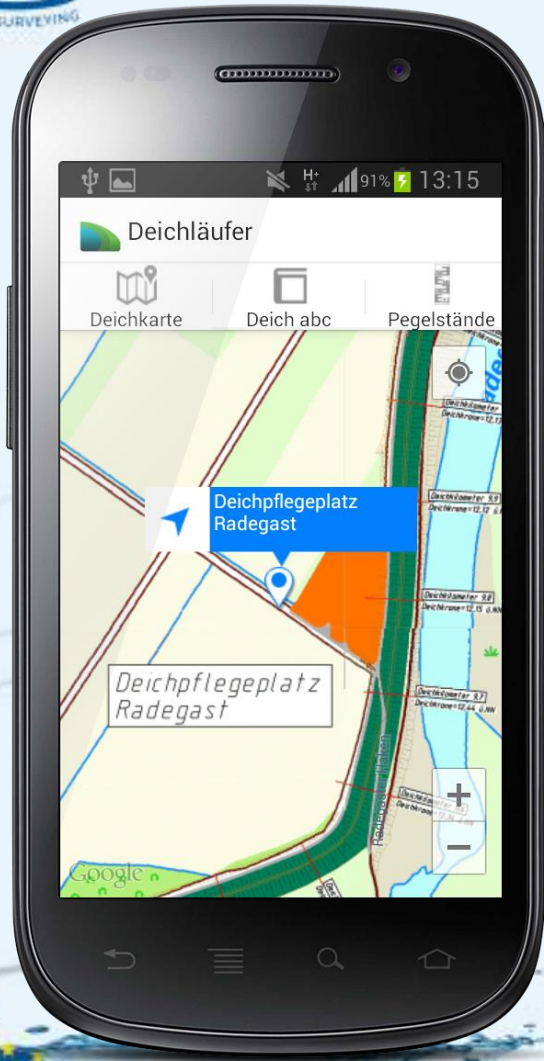
- Cartographic representation of the dyke and surrounding area with routing and positioning
- Dyke-ABC
- News and Information
- Daily updates on the water levels
- Coordination of volunteers and helpers .
- Internal area:
  - Logging the appearance of the dyke.
  - Logging the dyke guard.
  - Information on identifying dyke vulnerabilities.

# App content





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# deich-app.....

- The map shows the dyke within the jurisdiction of the dyke federation etc.
- Offline operation is possible
- Three levels
  - Google Maps
  - Topographic map
  - Own surveys and maps
- Relevant POIs are marked:
  - Sandbag filling stations
  - Dyke conservation areas.
  - Access/crossings, special structures.
  - Dyke guard areas
- Georeferencing of POIs and routing to Points, where helpers are needed.

