



## WG 11 – IMMERSED AND FLOATING TUNNELS

Animateur:

Jonathan Baber

Vice-Animateur:

Eelco van Putten

Tutor:

Davorin Kolic



# Working Group 11 – Immersed and Submerged Floating Tunnels

## Report from meetings:

- 32 attendees from 10 countries across
  - Europe, N. America and Asia
- Both Sunday and Monday meetings
- Work plan developed for coming year
- 9 project and technical reports both on immersed and submerged floating tunnels

# Working Group 11 – Immersed and Submerged Floating Tunnels

## Achievements 2015-2016

- Owner's guide to immersed tunnels:
  - 3<sup>rd</sup> edition of ITA report no.7 published
    - 13 new appendices + update of main document.
  - Drafts for 4<sup>th</sup> and final edition of ITA report no. 7 well progressed.



ITA – AITES 42nd General Assembly San Francisco, April 24 – 27, 2016

# Working Group 11 – Immersed and Submerged Floating Tunnels

## Achievements 2015-2016

- Owner's guide to immersed tunnels:

- 27 Annexes now complete

**2016:**

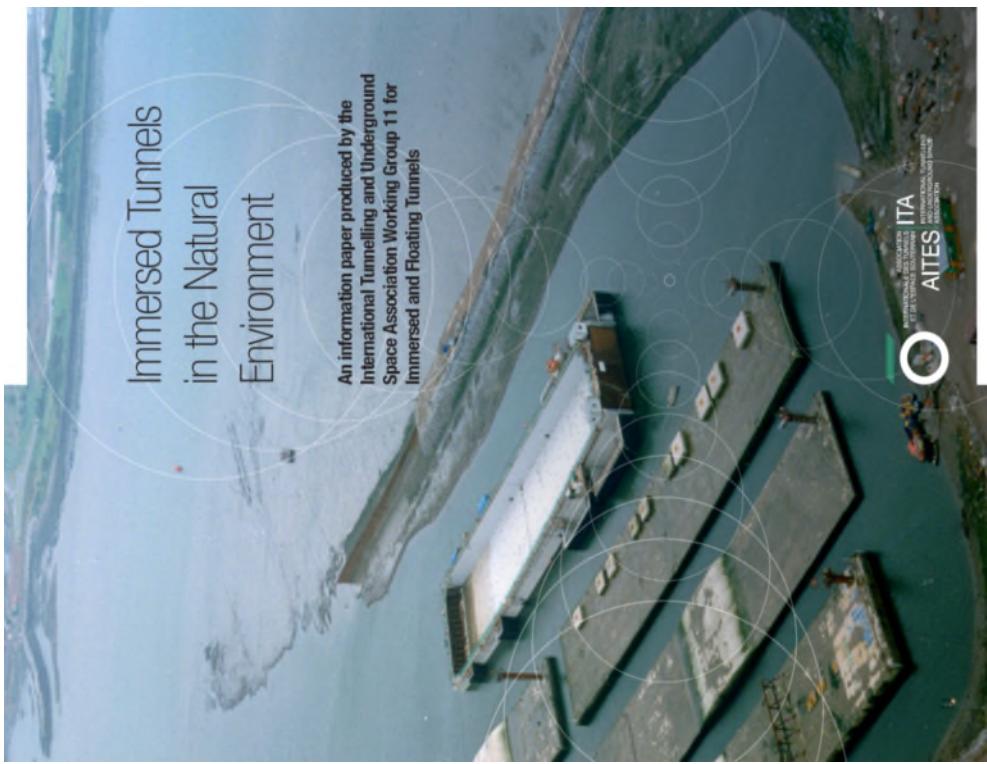
<b>3rd Edition</b>	
Fire protection (update)	Published
Management of immersed tunnel projects	Published
Tunnel element transportation	Published
Tunnel element mounted equipment	Published
Exceptional load cases	Published
Approach Structures	Published
Waterstops	Published
Element construction / Factory method	Published
Water conditions	Published
Waterproofing membranes	Published
Temporary prestressing	Published
Cathodic protection	Published
Dredging	Published
Maintenance and operation	Published

<b>1st Edition</b>	
Concrete - concrete construction	Published
Concrete - cracks	Published
Fire protection	Published
Tunnel Ventilation	Published
Segment joints	Published
Immersion joint	Published
<b>2nd Edition</b>	
Glossary of terms	Published
Closure joints	Published
Steel construction	Published
Element construction / casting basin	Published
Soil conditions	Published
Seismic design	Published
Compaction Grouting	Published
Refurbishment	Published
Tunnel element alignment	Published



# Working Group 11 – Immersed and Submerged Floating Tunnels

Achievements 2015-2016  
– Environmental paper published



# Working Group 11 – Immersed and Submerged Floating Tunnels

## Plan for 2016-2017:

- SFT Owners Guide
  - First draft will be completed and will undergo review.
- Immersed Tunnel Owners Guide (ITA report no.7):
  - Publication of 4<sup>th</sup> Edition by WTC2017 with all 45 Annexes complete.

4th Edition
Durability
Design standards
Health & Safety
Immersion joint seals
Leakages
Terminal Joints
Dualling tunnels
Immersion and buoyancy
Foundation/ Settlement
Tunnel backfill
As-built survey
Overall planning & geometry
Structural form
Spatial planning
Post-immersion works
Navigational safety
Contaminated soils
Tolerances



## **Working Group 11 – Immersed and Submerged Floating Tunnels**

**Plan for 2016-2017:**

- Transfer immersed tunnel catalogue to WG20 database.
- Commence construction risk information paper.