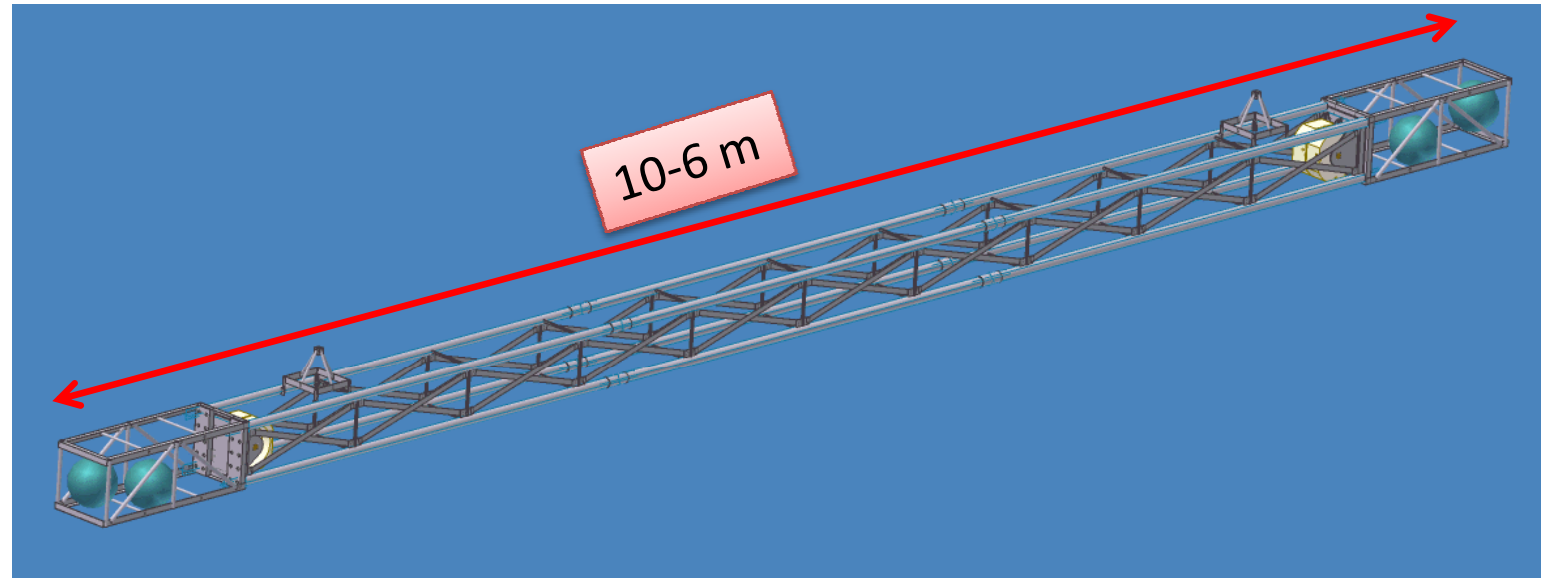
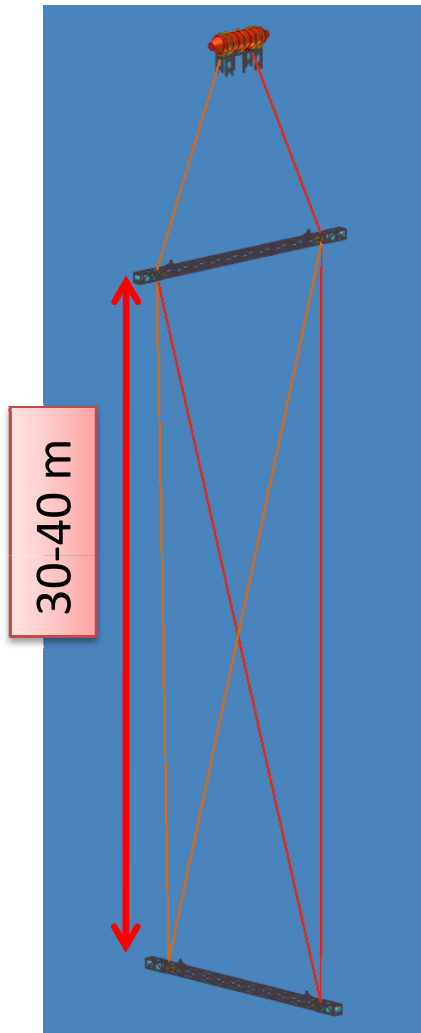


talk outline

- ✓ *vOne concept;*
- ✓ *backbone cabling issues and evolution;*
- ✓ *packaging for handling and deployment*

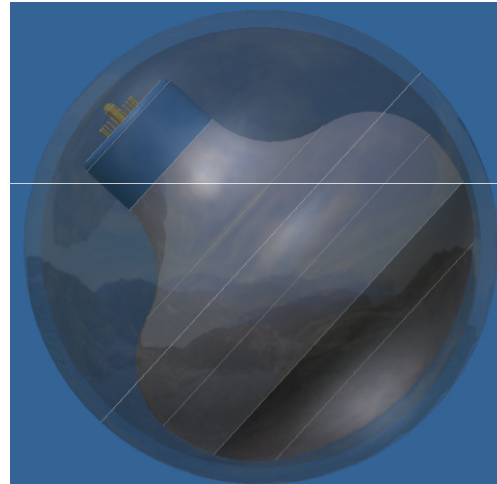
what is vOne

vOne is basically a concept that envelope the idea to arrange several storeys twisted of 90° each to the other in order to obtain a 3D detection unit



***it can be adapted to different specifications
depending on physics requirements***

- ✓ PMT vessel size;
- ✓ beam lengths;
- ✓ storey's vertical spacing;

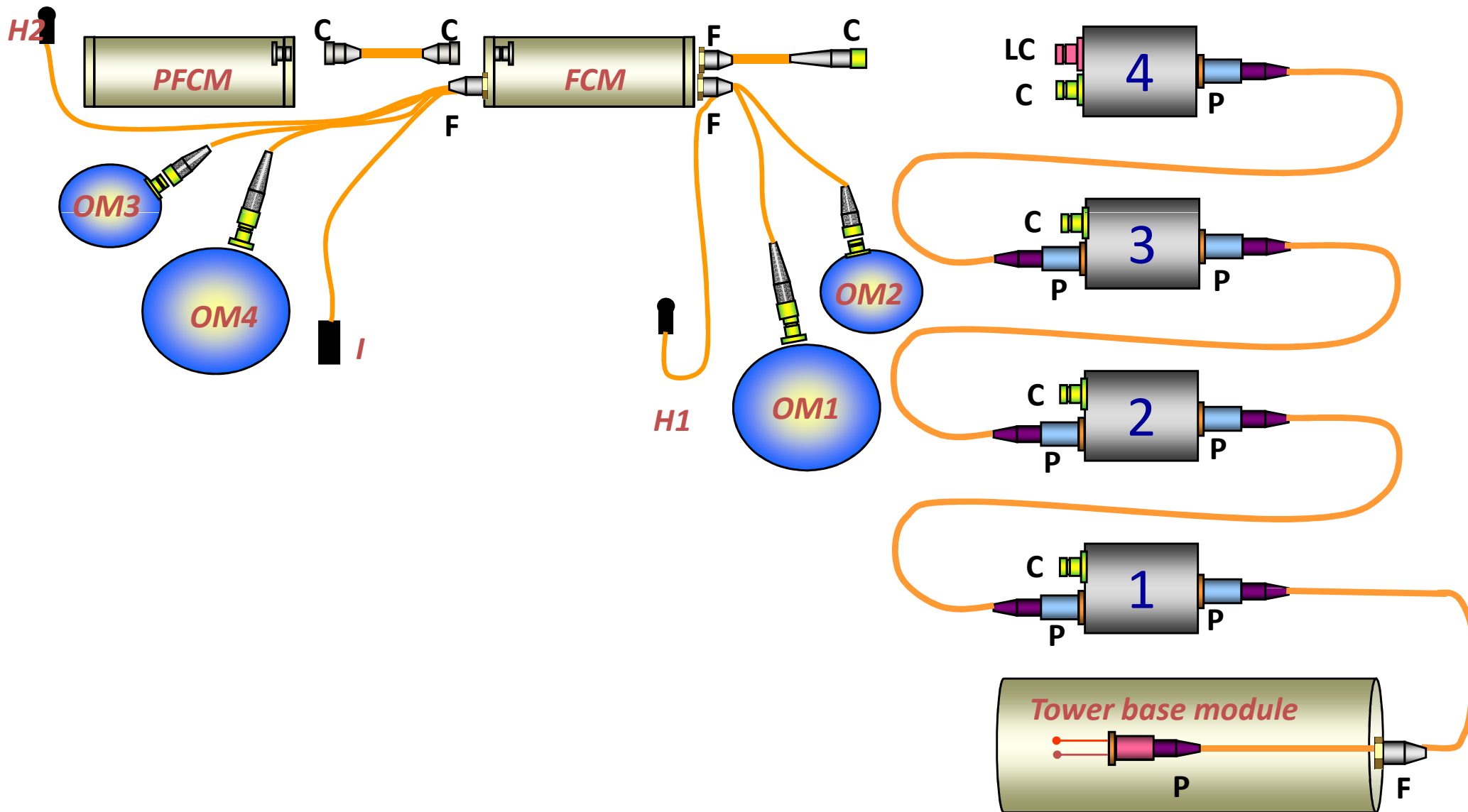


the integration process has been optimized by using the learned lessons

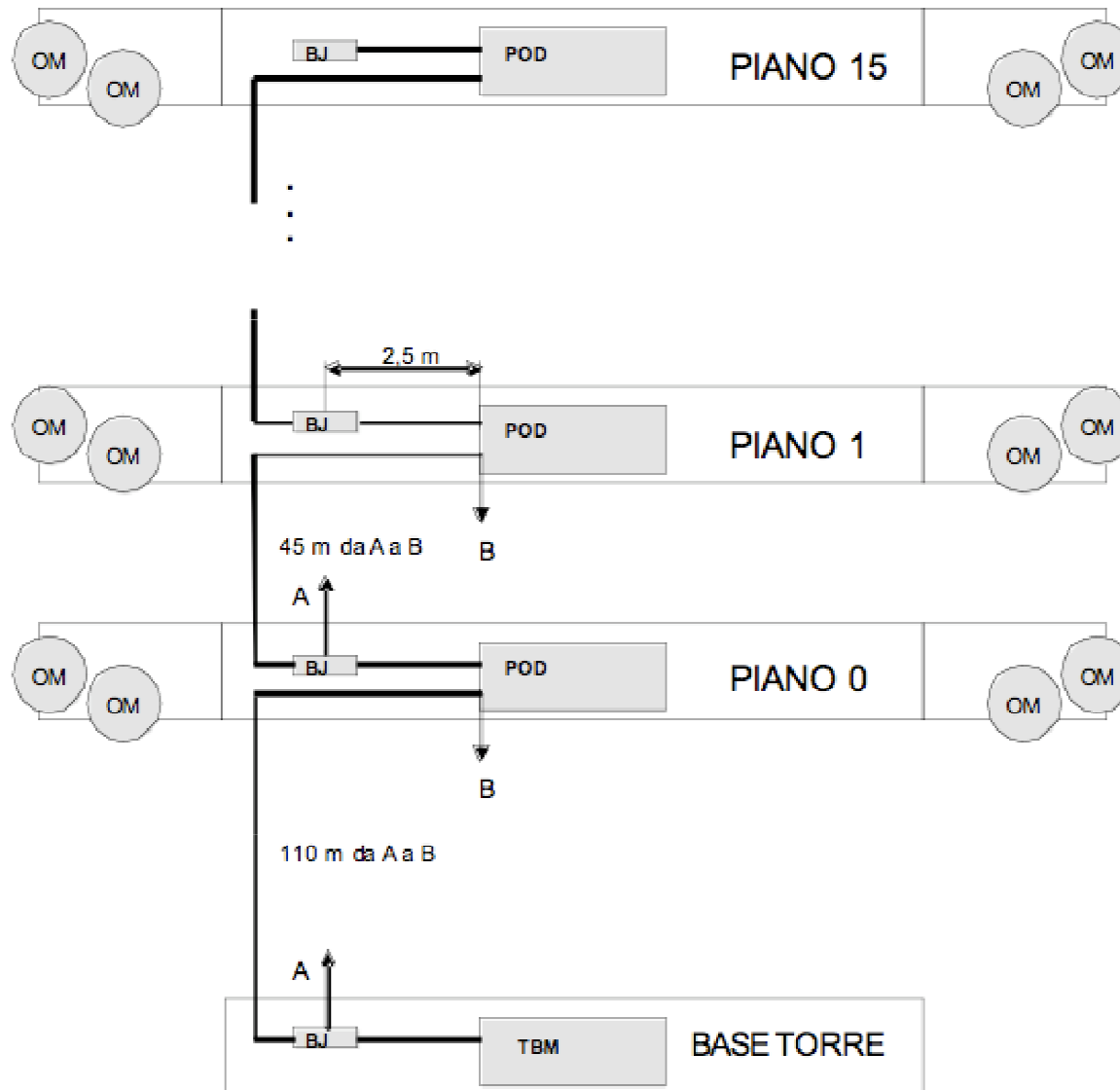
- ✓ the bottle neck of the integration is the cabling;
- ✓ the bottle neck of the cabling is the optical fibre routing/splicing were there are penetrators instead of connectors;
- ✓ the fibre routing is a time consuming activity that has to be avoided as much as possible;

TIME = MONEY

the backbone evolution 1/3



the backbone evolution 2/3

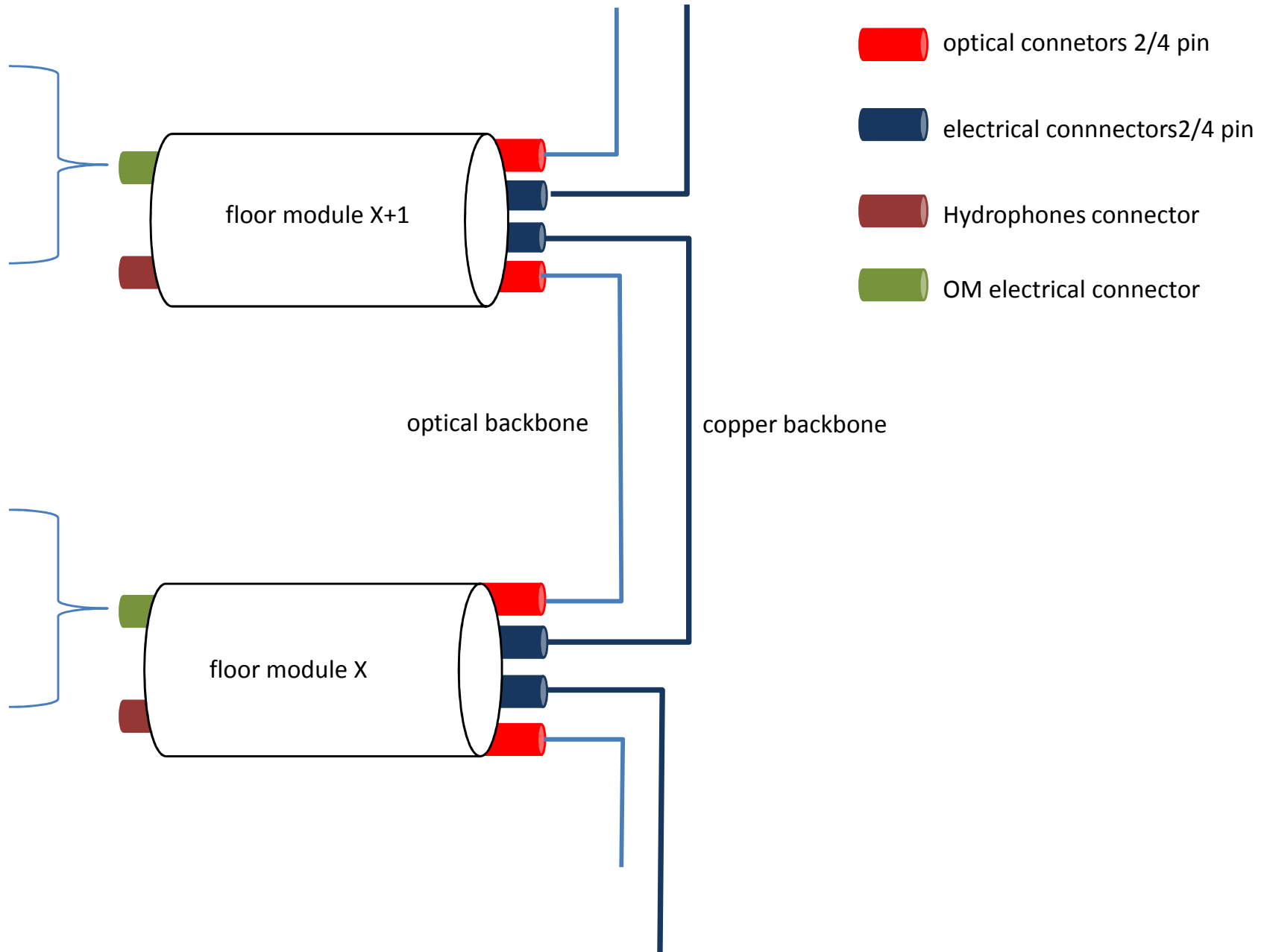


a backbone proposal for vOne

4/6 OM



4/6 OM



backbone evolution vs price reduction

TIME = MONEY

- ✓ **vOne** is simpler than phase 2
- ✓ phase 2 is simpler than phase 1
- ✓ phase1 => phase 2 - **50%**
- ✓ phase 2 => **vOne** -**40%**