

Structure of documentation for optical module assembly

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What We Need ?

We want to be sure that the assembly procedure is correct and repeatable;

We need to control Optical Module process integration, we want to track every part in the Optical Module;



We have to produce Optical Module Assembly Documentation; **Clear Simple Complete**

Analisis & Modelling

- **Collect technical information using Assembling procedure;**
- **Check all “input” ;**
- **Define structure of documentation.**

The Document

- Document is composed of detailed excel sheets;
- In some of these you can find details for several components of Optical Module;
- In other excel sheets for example the operator can write the information about serial number.

INFN Object Identifier

- Every component is identify with a single code :

INFN OID ;

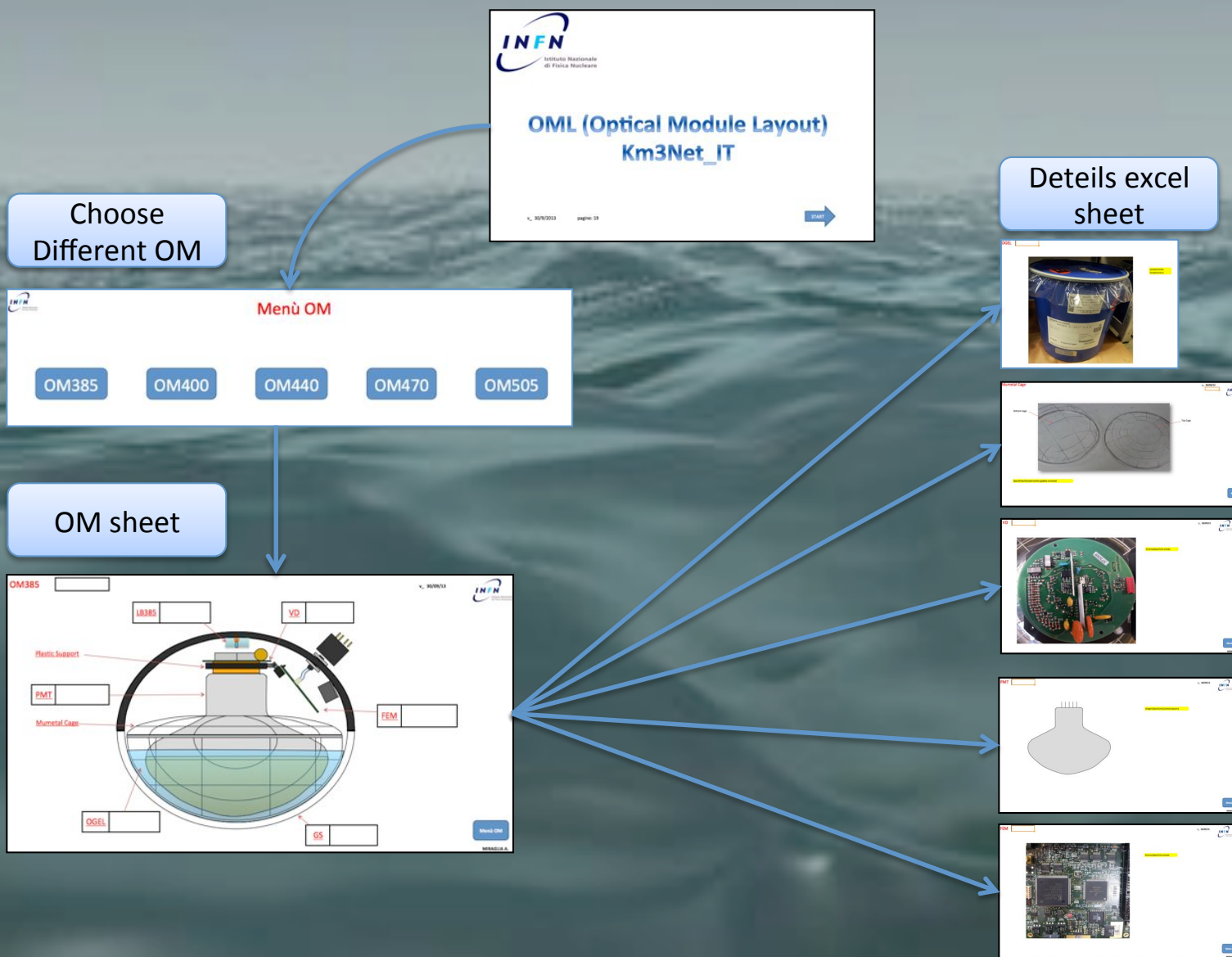
- **INFN OID** = (**INFN P/N** + **Serial number**);

- **INFN P/N** is defined by INFN people;

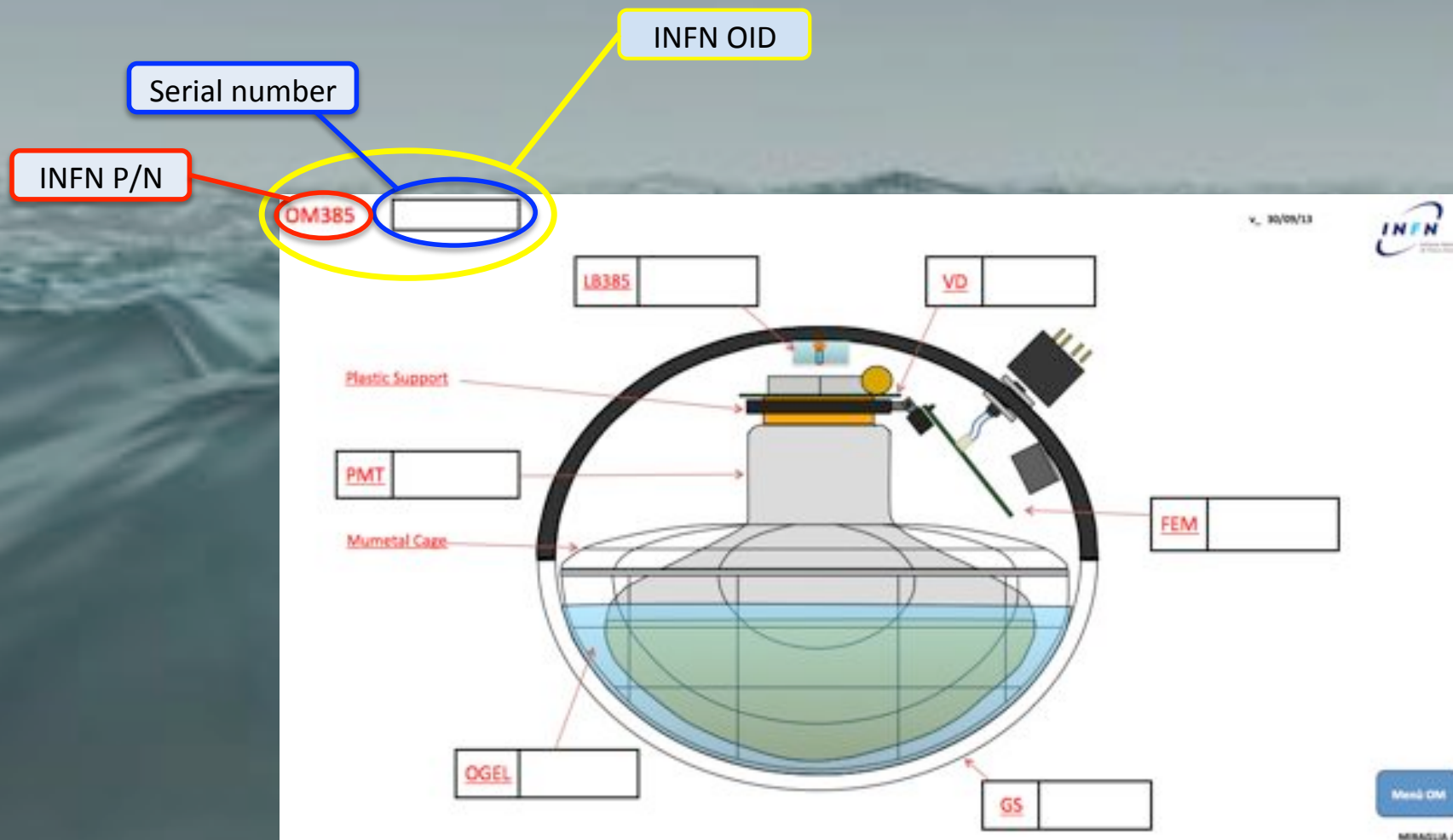
- **Serial number** is provided from company supplier and identify the object after product process..

- **INFN OID** uniquely identifies the single object.

Structure of Excel document



OM Assembling Form



Glass Sphere Detail

Sphere ID

Connector
PinOut



MC-BH-8M-ETHERNET SP ASSY (with metal nut, metal washer and plastic washer)

Elation Glass Sphere 2040-13V

Modulo ottico	Pinout M	Cavo	Conduttore	Pinout	Conduttore
 (MC-BH-8M ETHE SP ASSY)	2	Quadbin 3700B	White/Green	1	 800A White
	3		Green	2	
	1		White/Orange	3	
	4		Blue	4	
	5		White/Blue	5	
	6		Orange	6	
	7		White/Brown	7	
		Brown	8		

Pressure gauge

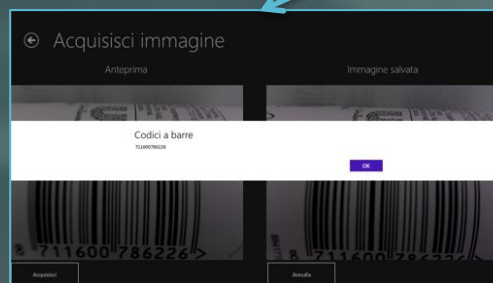
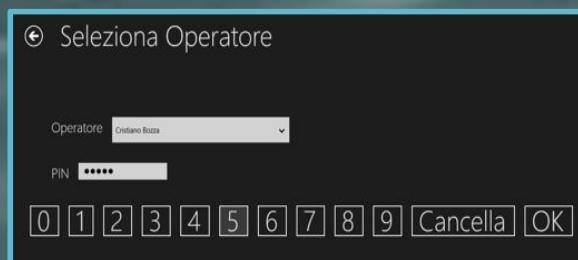
Pressure

User-friendly GUI app for tablet PC developed to assist/manage integration

By Cristiano Bozza



Example
Screenshot
from App



Conclusions

- **The Module Assembly document has been the basis for the subsequent development of a mobile application software to support the Optical Module integration;**
- **The information of the Optical Module assembling will be Integrated in a online database ;**
- **Each module will be tested at the end of the assembling process;**
- **Each module will have an ID document that will report all the information of each part;**

Thank you