

**Introduction :** The European project called “INDeT” (Integration of Non Destructive Testing) brings together major European aircraft manufacturers and Information Technologies (IT) developers for 3 years (start : June 2002). It contributes to improve inspection conditions, reliability and reduction of costs by implementing IT tools to NDT.

**Partners involved :** CNR-ISTI (I), EADS CRC (F) (Coordinator), Airbus (D), Airbus (S), Alenia (I), Fachhochschule Furtwangen (D), Dassault (F), IntelTec (I), NDT Expert (F), Sogitec (F), Tecnom (S), Univ. of Central Lancashire (GB), Univ. Limerick (Irl)

**Results :**

**Replacement of paper documentation and change for digital support :**

- . *Advantages / paper support :* updated documentation, easy access (dedicated server), reduced storage, multimedia content easier to understand than text (images, film, CAD files), increased interactivity (select only the needed information)
- . *Specifications* defined on analysis of today’s manual in aeronautics & interviews of world wide airlines and maintenance bases (Europe, North and South America, Russia, Africa, Asia)

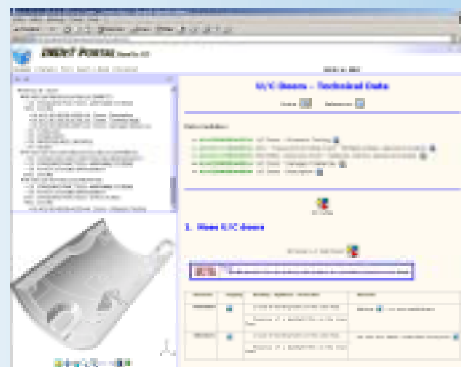
Visualisation of multimedia procedure on PC tablet or PDA



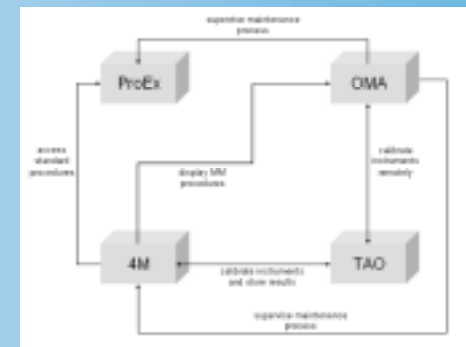
**3 approaches :**



Manual is integrated in a single data base (Alenia approach)



Separated manual on AECMA specifications (Dassault approach)



Separated manual on ATA specifications (Airbus approach)



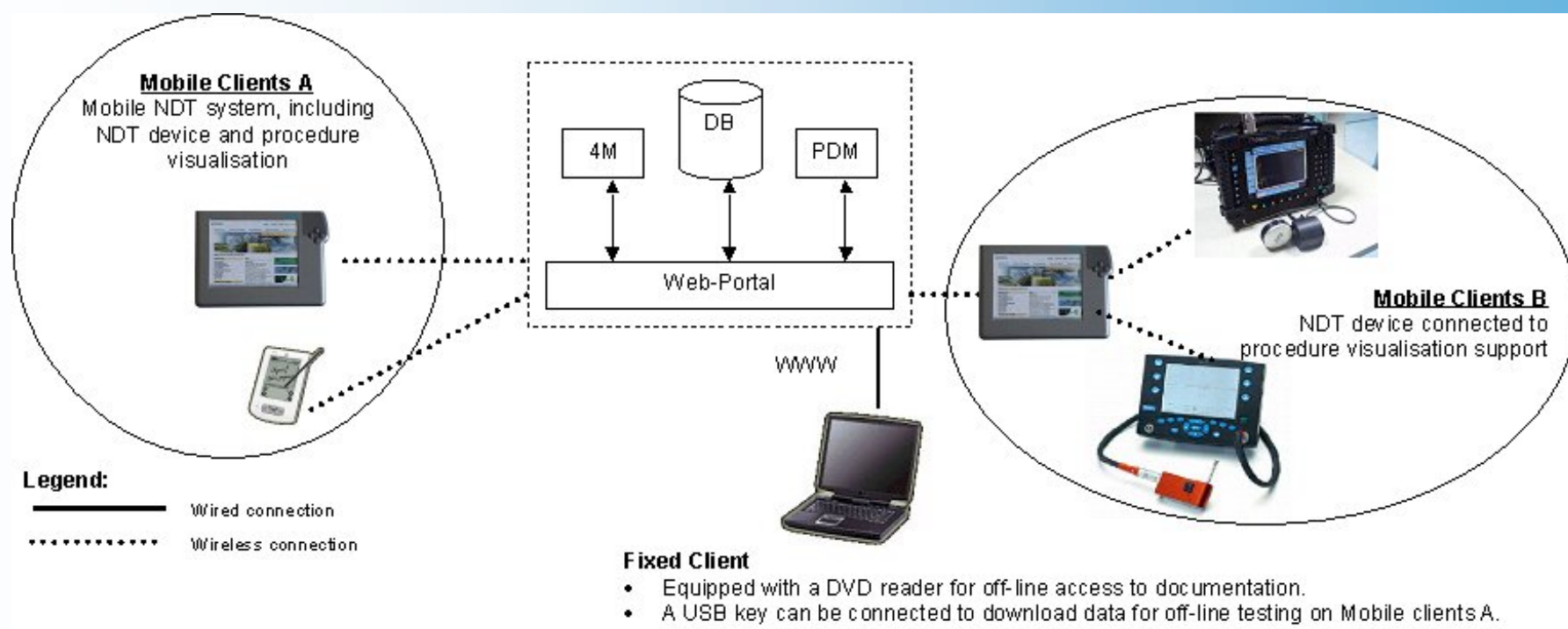
uniform user interface

**Change of information transfer :**

- . Web connections (updated and accessible data)
- . Real-time data information processing and communication (remote knowledge based inspection training, set-up and diagnosis) – *Online Maintenance assistance to NDT operator*

**Evolution of NDT environment :**

- . Integration of multimedia procedure on portable NDT equipment
- . Possibility to store relevant information (notes, images, settings, NDT data) during inspection and to exchange with NDT specialists
- . Life cycle monitoring of NDT data stored during the whole life of an operating aircraft



**Acknowledgements :** It gives us great pleasure to thank all INDeT project partners for the fruitful collaboration in progress and European Commission for financial support for the project.