



Global



Tracking Solutions Pty Ltd

***Radio Frequency
Identification Device
in
Explosives***

by John Moore, CEO

Traceability

BRAZILIZN DECREE - 1 January 2008

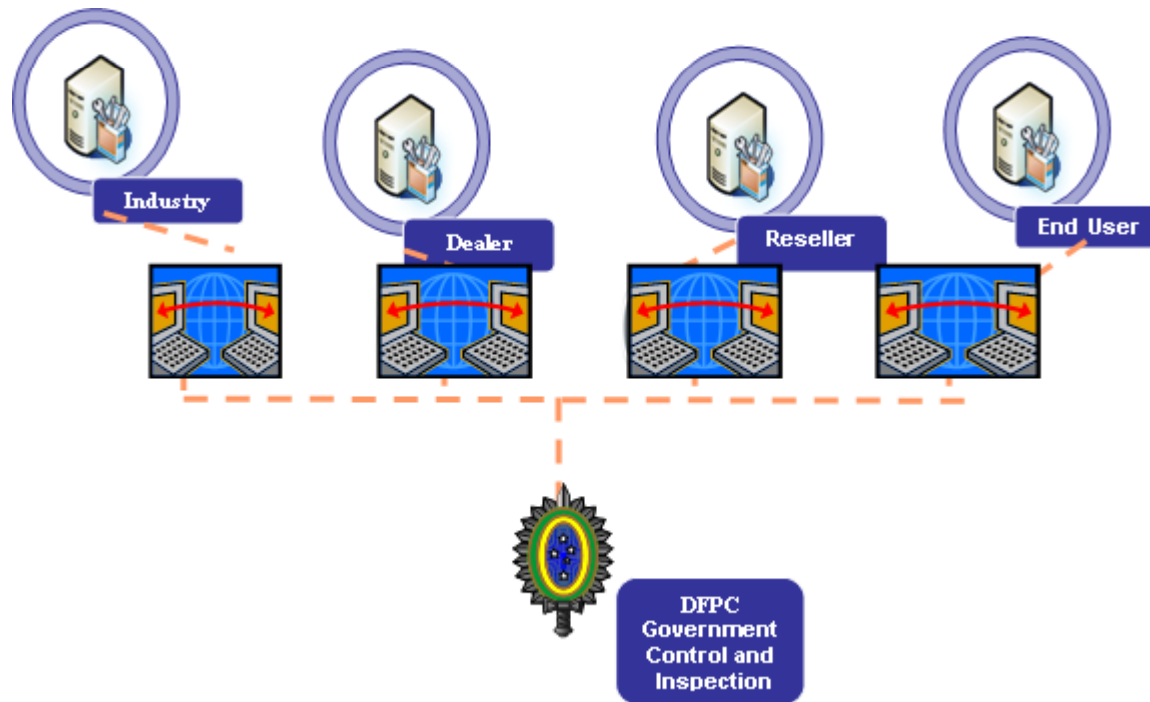
“Traceability is the capacity to recover background, application or localization of an item, through a single, standard and registered identification.

Traceability

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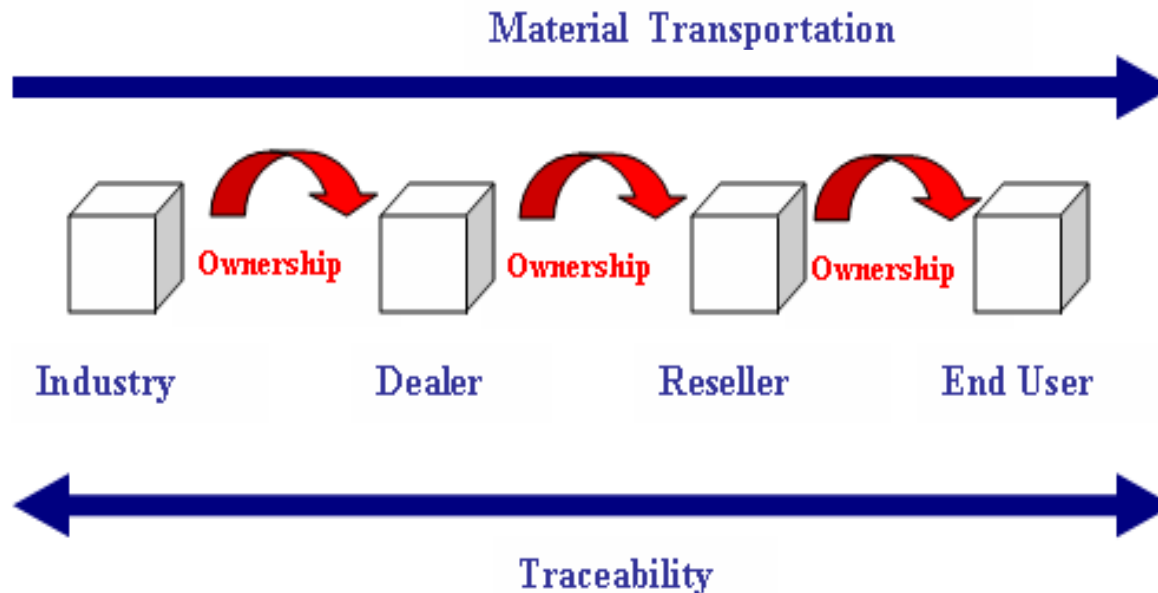
It is the identification process necessary to follow all events, occurrences, handlings and movements of a product”.



Traceability

THE EUROPEAN COMMUNITIES

“This should allow the identification and the traceability of an explosive from its production site and its first placing on the market until its final user and its use with a view to preventing misuse and theft and to assisting law enforcement authorities in the tracing of the origin of lost or stolen explosives.”



Requirements

Tracking of Explosives

Secure

Affordable

Fast

Efficient

**Radio Frequency Identification Device (RFID)
“ From Construction to Destruction and Beyond”**

RFID the Solutions

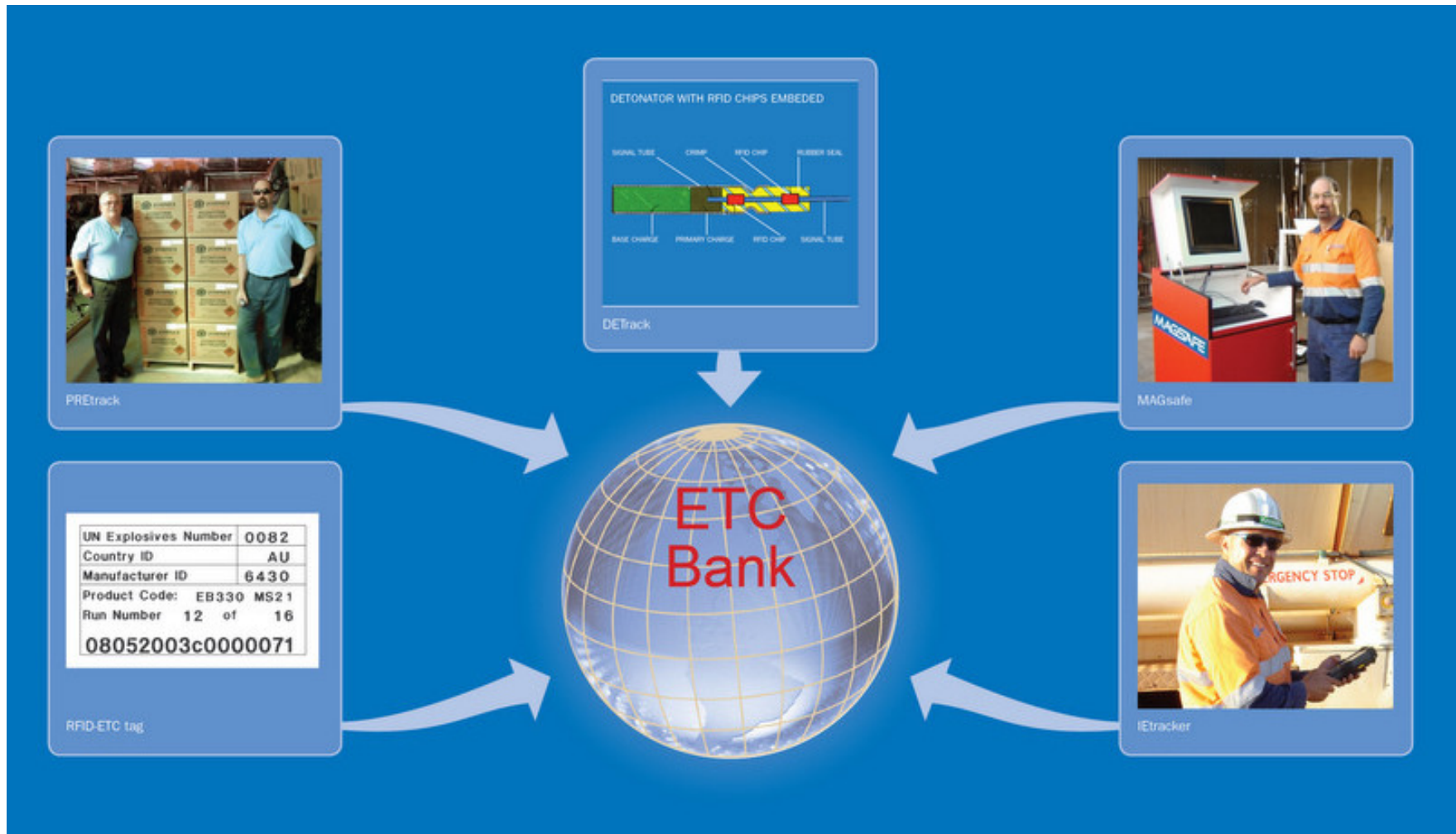


Explosives Tracking Code (ETC)

ETC

- **Solutions**
 - **International Standards Organization**
 - **Brazilian Decree**
 - **European Union regulations**
 - **Currently with ISO Australia**
- **Benefits**
 - **Explosive identification - EXPL**
 - **Bar-codes friendly**
 - **ETC – Identification number system**
 - **Electronic signature**

GTS flow chart



RFID in Manufacturing

- ***Solutions***
 - ***Tagging explosives in manufacturing***
 - ***Unit level tracking to the box***

- ***Benefits***
 - ***Traceability is at the start of the life cycle***
 - ***Faster industry implementation***

- ***Johnex Explosives***
 - ***May 2008 Kalgoorlie***

Magazine Management

- ***Solutions***
 - ***Bio reader access controls***
 - ***Static and mobile magazines***
 - ***Electronic Proof of Delivery***
- ***Benefits***
 - ***Inventory management system***
 - ***5 x 5 risk management system***
 - ***Electronic reporting***

Field tracking application

- ***Solutions***
 - ***Designed for Open cut and Underground***
 - ***Time, date and location of application***
 - ***Utilising mine data collection and dispatch systems***
- ***Benefits***
 - ***RFID tracking of explosives to the blast hole / face***
 - ***GPS hole identification in open cut***
 - ***Cross references with MAGsafe***

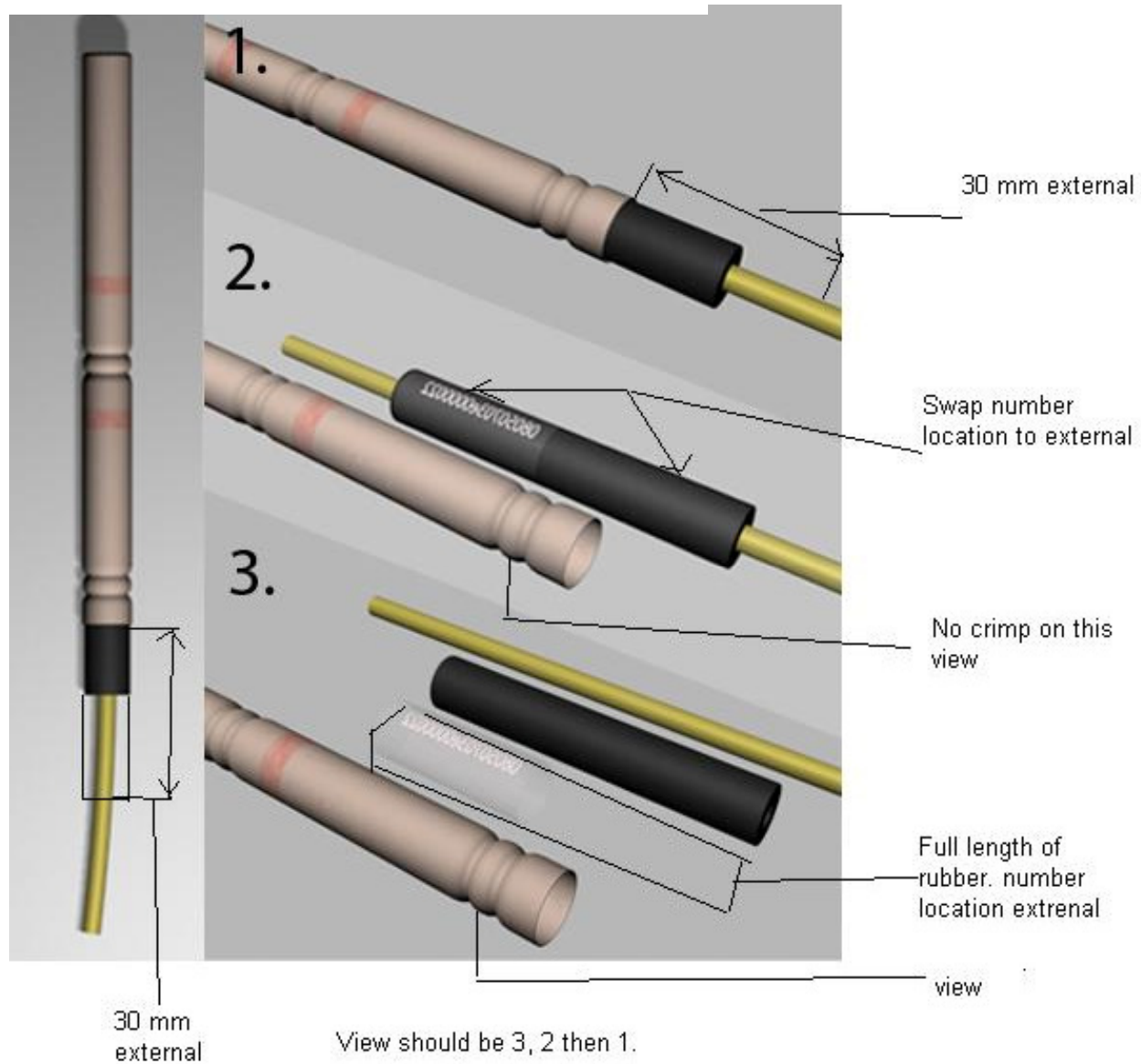
ETC data collection center

- ***Solutions***
 - ***Secure data storage centre***
 - ***Provide Data storage for all ETC users***
 - ***Data access for approved Customers / Governments***
- ***Benefits***
 - ***ETC user do not have to store data or 10 years***
 - ***Bank security access***
 - ***Issues both access and ETC ID numbers***

RFID tags in detonators

- ***Solutions***
 - ***Minimal retooling and easy to implement***
 - ***At 13.56 MHz in well below the no fire zone***
 - ***Applicable to Nonel, Electric and Electronic***
- ***Benefits***
 - ***Read / write RFID tags***
 - ***Build in redundancy***
 - ***Electronic signature***

DETrack



Thank you for your time

Questions

