

# TRACK AND TRACE DATABASE

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Implementation of the LOCO program in 2003 resulted in a strong demand for new administrative tools. A total of 20 sub-surface moorings deployed over the entire globe and to be redeployed on an average period of 18 months required sophisticated planning and management.

Also forced by the growing administrative demands from Customs, the Department of Physical Oceanography initiated the development of a new software package.

This package called Track and Trace, was meant to structure all administrative matters concerning Customs and to hold track on the location history of instruments and equipment. All equipment that undergoes transportation is identified with a barcode. Characteristic features like weight, serial number and manufacturer are stored in a relational database.

The input/output actions for the database are executed by a software package that consists of 4 main parts:

1. Equipment; this is the actual input side of the database, a single line represents the specific features and identifiers of each individual piece of equipment. (see fig. 1)
2. Transports, Cruises and Transits. Like individual pieces of equipment also the individual transports, cruises and transits are identified by a unique barcode. Equipment can be virtually moved from one location, transit or cruise to the other by scanning their barcode. Info on cruises and transits needed for the determination of equipments new location are made available through the NIOZ internal internet web pages.
3. Scanner Synchronization; info on equipment movement gathered through the scanning process as well as changes in the content of the database through the input in the Equipment program are inter-

changed with each other through a scanner synchronization program. (See Fig. 2)

4. Reports, this part is functioning as the output side of the database. Reports on the content of individual locations or movements of equipment or even specific custom documents-if required- can be generated.

The development of the database and the accompanying software was carried out by the Information and Presentation Centre (IPC) and vigorously tested over a period of several years.

To identify and describe existing problems as well as to help find solutions for the problems encountered a small user group was conducted representing most departments involved in the use and transportation of sea going equipment.

nomo	social	barcode	customs type	manufacturer	owner	rolbase code	status	type	value	instrument weight	transport wt
Uellen houder draagbox	n.v.l.	2120	consumable	110 Instrume	hill		Operational	11ash, Lv Sentinel	267	0	0
Uellen houder draagbox	n.v.l.	2247	consumable	110 Instrume	hill		Operational	11ash, Lv Sentinel	267	0	0
Batterij houder vkrandbox	n.v.l.	2624	consumable	MD Instrume	hill		Operational	Plastic, bx Sentinel	267	0	0
Batterij, Mt. alk WHL 75	0	8898	banded	ROJ USA	hill		Operational	7076001-00	4790	3	319
Bullseye Pressure Sensor	0342147-0016	13154	banded	See-Bird Eler	hill		Operational	SBE CSBPB	19900	14	14
box, alu	FysDo 02	0	free	Sy-Tech	hiehle		Operational	groot	30	3	3
box, alu	FysDo 01	0	free	Sy-Tech	hiehle		Operational	groot	3	3	3
hse, alu	SA	1429	free	WIP	hiehle		Operational	vray, small	1000	8	8
hse, alu	FysDo 03	0	free	Sy-Tech	hiehle		Operational	klein	20	0	0
hse, alu	CTD box 7	0	free	Sy-Tech	hiehle		Operational	groot	30	0	0
C on T recorder	2849	3704	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
L en T recorder	2850	3707	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
L en T recorder	2851	3780	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
L en T recorder	2859	11288	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
C on T recorder	2871	3825	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
C on T recorder	2874	0	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
C on T recorder	2876	3182	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4898	3	3
C on T recorder	2822	1649	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4471	3	3
C on T recorder	4347	12698	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4243	4	4
F an T recorder	4347	13030	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4243	4	4
F an T recorder	4345	13035	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4243	4	4
L en T recorder	4133	3067	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4243	3	3
L en T recorder	4140	3070	banded	See-Bird Eler	hill		Operational	SBE 37-SM Microcat	4243	4	4

Name	L en T recorder	Department	FYS	Discrepancy	Type	Invoice	Manufacturer	Codes	Networks	Status
Barcode	3704	Owner	hill	Dimensions						
Social	2849	Kind of packing unit / housing		Wendit	3					
Type	SBE 37-SM Microcat	None		Buoyancy	-2.3					
Description				Max Depth	7000					
Category										

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Fig. 1. Equipment; the input side of the database

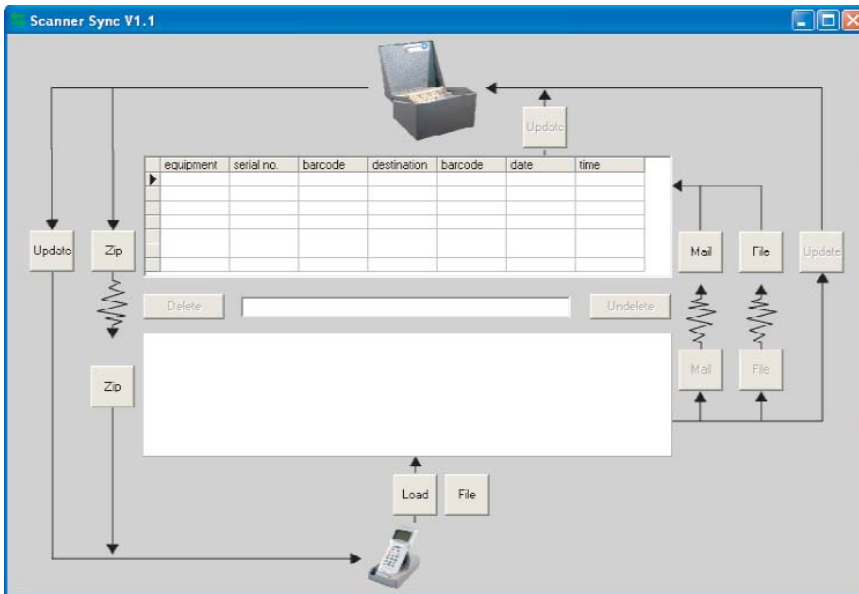


Fig. 2 Database/scanner synchronization program

This group consisted of:

- \* Pieter van Kralingen, Head Facility Management, Chairman
- \* Wim Pool, Head Information and Presentation Centre, software development
- \* Jan Derksen, Information and Presentation Centre, software development
- \* Margriet Hiehle, Data Management Group, member/user
- \* Peter-Roy Alkema, Department Vessels and Logistics, member/user
- \* Jack Schilling, Head Marine Technology Mechanical, member/user
- \* Ruud Groenewegen, Marine Technology Electronics, member/user
- \* Theo Hillebrand, Physical Oceanography, member/user
- \* Anne-Marie Markesteyn, Facility Management, secretary

The final result of all efforts is:

- a. whenever needed uniform custom documents can be generated just by a few mouse clicks.
- b. up to date administration of the NIOZ custom bonded area just by a few mouse clicks.
- c. production of reports about the present location or entire location history of equipment just by a few mouse clicks.

The programme will be effective from January 2007.

