

COMMISSION
OF THE
EUROPEAN COMMUNITIES

Directorate-General
Information Market and Innovation

Luxembourg.....

Raw SYSTRAN output, (E-F, F-E, E-I)
post-edited by Commission translators,
autumn

RAW

1 SYSE.DC6104.

2 WATER INFORMATION FOR EUROPE - THE ART AND TECHNOLOGY OF COMMUNICATION.
SUR L'INTERACTION DE L'EAU AVEC L'EUROPE - L'ART ET LA TECHNOLOGIE DE LA COMMUNICATION.

3 P.J. RUSSELL, DR. W.B. WILKINSON and R.I. ODELL.

4 Communications Group, Water Research Centre, U.K.
*sur le Réseau Uni-
de l'eau, U.K.*

5 Summary. *RESUME*

6 About half a million people are employed in the water industry in the EEC countries.
*un demi million
des personnes de l'industrie de l'eau dans des pays DE LA CEE.*

7 The water industry is thus a major employer with wide-ranging, multidisciplinary information requirements.
*donc
est ainsi un employeur important avec
des besoins complémentaires et multidisciplinaires de l'information.*

8 Specific and general data bases to meet these requirements now exist on EURONET.
*Spécialisés qui permettent de
généralistes pour répondre*

9 However, many engineers and scientists in the industry are not aware of these data bases and this problem must be overcome before training in use of the systems can begin.
*de nombreux
à ces exigences existent maintenant sur EURONET.
Cependant, beaucoup d'ingénieurs et scientifiques dans l'industrie ne sont pas conscients de ces bases de données, et un problème doit être surmonté avant la formation des utilisateurs des systèmes.*

des systèmes peut commencer.

10 Advances in communications technology do not necessarily lead to improved communications.
profils de Co technique de Co technique de communications ne sont pas nécessairement améliorés.

11 A description is given of how the Water Research Centre attempts to communicate with other European water institutes to achieve collaboration in research projects and successful literature exchange.
le rapport décrit une description est donnée de la façon dont le Centre de recherches de l'eau essaye de communiquer avec d'autres instituts européens de l'eau pour réaliser la collaboration dans les projets de recherches et l'échange réussi de littérature.

12 1.

13 L'INDUSTRIE DE L'EAU.

The water industry of the EEC countries is a large concern in terms of numbers of employees (about 500, 000 in total) and annual turnover (about #1450 million in the U.K. alone).
de l'industrie de l'eau des pays de la CEE est une grande préoccupation en termes de nombre d'employés (environ 500, 000 dans le total) et de chiffre d'affaires annuel (environ millions #1450 en Grande-Bretagne seule).

15 C' est une industrie conservatrice qui n'est pas dépendante sur les avancées technologiques.
est pas dépendante

16 Néanmoins, elle est multidisciplinaire dans ses besoins d'information qui couvrent le chimique, biologique et l'ingénierie des sciences de gestion.
En fait, elle est multidisciplinaire dans ses besoins pour l'information qui couvre le chimique, les sciences biologiques et de technologie aussi bien que les aspects de gestion, l'ingénieur.

RAW

Application de la micrologique au contrôle des opérations de production ^{managing} to the control of the production operations

Alan - Télécom

but de la recherche: 4.8.81 2 Aim of the research:

Perfectionner les appareillages existants de sorte que les préposés soient débarrassés des tâches dans lesquelles leur jugement n'intervient pas. ^{perfed} ^{apparous} staff can be relieved of ^{main} ^{intervenez} To improve existing equipments so that the operators are relieved of tasks in which their judgement does not intervene

Travaux exécutés au cours de l'année et résultats essentiels: 4 Work carried out during the year and essential results:

1) Application au central de télésurveillance d'engins sur pneus ^{remote monitoring station for treadless vehicles} ^{exchange of tele-surveillance of equipment on tyres} 5 1) Application to the exchange of tele-surveillance of equipment on tyres

Il s'agit d'un matériel à microprocesseur qui est chargé de traiter les informations fournies par un appareillage de détection de passage d'engins sur pneus (D.P.E.). ^{This microprocessor-based system processes} ^{charged to treat the information provided by an equipment of treadless vehicles} ^{equipment on tyres (D.P.E.).} 6 It is a matter of an equipment with microprocessor which is charged to treat the information provided by an equipment of treadless vehicles

Il édite des rapports de pose et de journée indiquant la durée et l'importance relative des périodes consacrées par chaque engin surpneillé aux diverses activités possibles: évacuation des produits, transport de matériel, entretien, station service ... ainsi que le nombre de godets de charbon ^{shift} ^{It publishes station and day reports indicating the duration and the importance relative of the periods devoted by each vehicle, recorded on instrument supervised to the various possible activities: local clearance, materials, refuelling point} ^{evacuation of the products, transport of equipment, maintenance, station service ... as well as the number of} 7 It publishes station and day reports indicating the duration and the importance relative of the periods devoted by each vehicle, recorded on instrument supervised to the various possible activities: local clearance, materials, refuelling point

bucket, emptied.

evacuated.

Des renseignements globaux cumulés par engin ou par activité 3 A total information cumulated by instrument or activity also sont également fournis. is provided.

La programmation du microprocesseur a été réalisée au cours 9 The programming of the microprocessor was achieved during de l'année 1980 et le matériel installé aux Houillères d' Aquitaine in the first January 1981, days.

Par ailleurs, les Houillères d' Aquitaine ont mis en service 10 Also, the mines of Aquitaine put in service a differed able un mini-ordinateur capable de traiter en différé, pour des mini computer of latter in, for statistical studies, the études statistiques, les informations fournies par le information provided by the preceding equipment. matériel précédent.

Ce mini-ordinateur sert également à des calculs d'arrage 11 This mini computer also is used for land surveying d' explosibilité de mélanges gazeux, ... calculations, of gaseous mixtures, explosiveness, ...

2) Enregistreurs magnétiques 12 2) Magnetic recorders

Cinq appareils ont été réalisés et testés en laboratoire. 13 Five appliances were achieved and tested in laboratory

3) Application à la télécommande des machines 14 3) Application to the remote control of the machines

Un cahier des charges concernant la réalisation d' une 15 Specifications concerning the realization of a télécommande à microprocesseur capable d' envoyer une microprocessor remote control able to send a fifty of cinquantaine d' ordres, dont plusieurs proportionnels, a été orders, whose several proportional, were elaborate.

06/29
08/29
09/29
11/5
M. Bagnoli - Soc. Générale
M. L. G. - Soc. Générale
M. J. B. - Soc. Générale

RAW

1 SYSE.DCC114.

INTERNATIONAL SAFEGUARDS VERIFICATION CAPABILITIES AND CONSTRAINTS IN LEU FABRICATION PLANT. Controllato

Controllato di sicurezza dell'Euroform

A. Rota and K. Simonet (EURATOM / Safeguards Directorate Luxembourg) and P. Boermans (FBFC / Dessel - Belgium).

6 Riassunto.

Nel

In the light water reactor cycles there are two points of paramount importance for the implementation of the international safeguards: the output of the fabrication plants and the input of the reprocessing plants (dissolution and liquor accountability).

In the latter the information generated in the former has again safeguards relevance.

Today no technical means capable to measure directly the whole assembly content are available; in grado di

the verification of the relevant nuclear material data, as

elemento di combustibile

al

the verification of the relevant nuclear material data, as

5 Nel del reattore ad acqua leggera X (cicli) sono due punti di importanza preminente per l'esecuzione delle salvaguardie internazionali: l'output dell'impianto di fabbricazione e l'input degli impianti di (dissoluzione e contabilità del liquido).

semplice

6 Nell'ultimo punto le informazioni prodotte nel primo impianto

salvaguardia ancora pertinente, non fondamentale per le salvaguardie

Fino ad oggi

7 ~~nessun~~ oggi nessun mezzo tecnico ~~esistente~~ per misurare

direttamente l'intero contenuto dell'assemblaggio sono

disponibili

declared by the operator, is obtained through indirect inspector's activities. 8

One of the possible practical approaches, suggested by the above mentioned situation, is described on the basis of a real case, taken as significative example.

Some inspection activities, capable to provide elements of judgement to assess the credibility of the operator's data concerning the fabricated assemblies, have been envisaged.

10 ~~various~~ ^{per} attività di ispezione, ~~capaci~~ ^{in grado di} fornire gli elementi di giudizio ~~per~~ ^{per} valutare la credibilità dei dati dell'operatore ~~devozioni di combustibile~~ ^{devozioni di combustibile} riguardo agli ~~assemblaggi~~ ^{assemblaggi} fabbricati, sono state previste. X

They have been designed in the respect of the limitations imposed by the international safeguards agreement.

11 Sono stati concepiti ~~rispetto~~ ^{nel} delle limitazioni imposte dall'accordo ~~di garanzia~~ ^{di garanzia} internazionale ~~sulle salvaguardie~~ ^{sulle salvaguardie}. ?

1. 12 1.

Introduction.

13 Introduction.

The LWR fuel cycle includes two points which are of special importance for safeguards implementation.

14 Il ciclo del ~~reattore~~ ^{reattore} LWR include due punti che sono di importanza ~~funzionale~~ ^{funzionale} per l'estensione di salvaguardie ~~fondamentale~~ ^{fondamentale}.

They are the output of fuel fabrication plants and the input of reprocessing facilities.

15 Sono l'output ~~del~~ ^{del} impianto di fabbricazione del combustibile ~~caricante~~ ^{caricante} e l'input degli impianti di ~~riciclaggio~~ ^{riciclaggio} ~~di combustibile~~ ^{di combustibile}.

In fact these points represent respectively the last physical verification possibility for the nuclear material

16 ~~per~~ ^{per} questi punti rappresentano rispettivamente l'ultima possibilità fisica di ~~verificazione~~ ^{verificazione} per il materiale /