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# Translating administrative terminology using an Olivetti M24

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Perhaps it would be sensible to begin by saying something about the original need that led to the establishment of the Norwegian Project for Multilingual Administrative Nomenclature (ADNOM) on 1 January 1982. The Head of the Translation Division at the Ministry of Foreign Affairs had approached me during the 1970s to discuss the question of how to standardise in English and other foreign languages the names of Norwegian institutions, occupational designations, titles of Acts of the Storting and so forth. The reason he raised the issue was that many Norwegian institutions were known under several different English names abroad, because different translators went for different solutions, with the result that considerable confusion sometimes arose, not least for the Norwegian postal authorities.

In the course of our discussions we decided to draw a clear distinction between technical terminology on the one hand and administrative terminology on the other. Norway already had a Council for Technical Terminology, and we decided to define technical terminology as sets of terms relating to phenomena in the real world which do not change from one language community to another. For example, an Olivetti M24 is the same machine with the same parts and the same functions no matter which language community it is being used in. It should therefore be possible to devise instruction and operating manuals for the Olivetti M24 in any language community where personal computers are known, provided one has done the necessary 'detective work', which means checking that one really has labelled the parts and functions in conformity with the language in question. In this way one can also construct glossaries such as *Norsk dataordbok*<sup>1</sup>, which list terms and perhaps definitions in more than one language.

We decided to define administrative terminology as sets of terms relating to phenomena that *do* change from one language community to another because human beings in different societies choose to administer their affairs differently. In Norway we do not find the same educational system as one finds in England and Wales, we do not find the same legal system or the same system of social security. This means that Norway has terms in Norwegian that designate phenomena that are specifically Norwegian, just as Britain has designations such as the 'Chancellor of the Duchy of Lancaster' that are specifically British, and we have to face the fact that very often we will not find cultural equivalents to help the translator.

The Translation Division of the Ministry of Foreign Affairs has as part of its mandate a duty to promote the use of standardised administrative terminology and nomenclature in English, French and German throughout the state administration in Norway, but the only official language in this country is Norwegian in either of its two forms, Bokmål and Nynorsk. This means that although all Norwegian children are required by law to be taught English at school, there are no official English names for any Norwegian institutions, and individual translators are free to invent whatever names they choose. Clearly this is an unfortunate situation and it is one which the ADNOM project is trying to solve, albeit very slowly.

There is not time here to go into all the aspects of the ADNOM project, but suffice it to say that we have worked out in co-operation with the Centre for Translation and Language Studies at the University of Surrey and the Council for Technical Terminology in Oslo a set of principles to be followed in devising foreign-language terminology and nomenclature to provide translation equivalents for Norwegian phenomena. Briefly, for example in the case of English, we agree on terms and names with the various ministries and directorates concerned, and we then store them in our database at the University of Oslo.

Originally ADNOM stored data in the Norwegian Term Bank at the University of Bergen, and indeed the first edition of the ADNOM glossary<sup>2</sup> was produced in co-operation with the Norwegian Term Bank. However, as a result of changes in staff in Bergen and with the advent of reasonably priced personal computers, it became essential for ADNOM to transfer its database to the University of Oslo. At an earlier Aslib conference my ADNOM colleague, Brit Elin Førsund and I discussed personal computers with various delegates, and we finally decided that what we wanted was an Olivetti M24 with a 20 megabyte hard disk. The M24 uses MSDOS, which means that it is compatible with IBM machines, and the MSDOS version we are using is 3.10. We were able to buy our Olivetti M24 in February 1986 as a result of a grant earmarked for this purpose from the Norwegian Research Council for Science and the Humanities (NAVF) at the end of 1985. So generous was the grant from the Research Council that we also decided to buy a colour monitor to display our records, and there is

no doubt in our minds that we prefer the colour screen to monochrome. At the same time with the same grant we bought an Olivetti ET111 electronic typewriter with an interface for connection as a printer to the M24. The ET111 gives us very high-quality printouts, but it is of course relatively slow. For rapid printing we have to use another printer at the University. ADNOM has a formal co-operation agreement with the Norwegian Council for Technical Terminology as a result of which Håvard Hjulstad made his TPED (TermPostEDitor = Term Record Editor) program<sup>3</sup> available to us free of charge. I should perhaps mention at this point that Håvard Hjulstad was the person responsible for the programming and computer work in connection with two major Norwegian dictionaries of Bokmål<sup>4</sup> and Nynorsk.<sup>5</sup> Since I am not a programmer and being an absolute beginner where computers are concerned, I shall do my best to describe TPED and the way we use it in terms that I hope everybody will understand. What we needed was a program that would allow us to store entries, or records as we normally call them, in our database in such a way that we could have fields in Norwegian in its two forms, in English and in various other languages, with the possibility of inserting information about the source of our data and of being able to modify any individual field at any time. Let me say at once that ADNOM's database goes from Norwegian to English and other languages, and that Norwegian is always the source language. In Norway the two forms of Norwegian, Bokmål and Nynorsk, have equal status, which means that all our records begin with terms or names in both forms. A typical TPED record has the following format:

### RECORD NUMBER 000000719

- NB00 Rådet for videregående opplæring
- NB01 RVO
- NB03 videregående opplæring
- NN00 Rådet for vidaregåande opplæring
- NN01 RVO
- NN03 vidaregåande opplæring
- EN00 National Council for Upper Secondary Education
- NB10 Kirke- og undervisningsdepartementet
- NB10 Skoleavdelingen
- TT83
- TT93 Brev av 28.4.83

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If we take the example of a record where we have managed to collect data in more languages, it will look much the same with the addition of the relevant field codes:

### RECORD NUMBER 000000138

NB00	ľ	lor	li	sk	samisk	ins	titutt
	_	-					

NN00 Nordisk samisk institutt

EN00	Nordic Sami Institute
SM00	Sami instituhtta
FI00	Pohjoismainen saamelaisinstituutti
TT83	A
TT93	Brev fra Sámi instituhtta datert 9. januar 1986

TPED has language codes such as NB for Norwegian Bokmål, NN for Norwegian Nynorsk, EN for English, SM for Sami and FI for Finnish. I should perhaps at this point say a brief word about the language I have called Sami. It is probably better known as Lappish to most people outside Norway, but the Sami people themselves dislike the terms Lapp and Lappish. There are roughly 35,000 speakers of Sami, of whom some 20,000 live in Norway. The language belongs to the Finno-Ugric group and is thus totally different from Norwegian. It is not an official language in Norway, but for cultural reasons we feel it is very important to include Sami in our database. The programme allows other language codes to be added at any time, which means that if we are suddenly able to find people willing to work on, say, the standardisation of the names of Norwegian institutions in French, then we can simply insert the code FR for fields in French.

The field-type codes consist of two digits. For example 00 stands for a primary term, 01 for a synonym or abbreviation, 10 is a higher term, and so forth. Field codes such as TT83 and TT93 stand for internal project classification and source of information respectively. In our first example, record no. 719, we can see that the National Council for Secondary Education comes under Kirke- og undervisningsdepartementet (Ministry of Education) and Skoleavdelingen (Schools Department) within the Ministry of Education. NB03 is a search term in Bokmål, which allows one to search for the Council simply by keying in 'NB videregående opplæring'.

TPED has five files of the following form:

ADNOM.DTA	random access file
ADNOM.TXT	sequential file
ADNOM.IXN	file providing indexing by number
ADNOM.IXF	file providing indexing by field
ADNOM.FRM	file for inserting the field codes

For example, if one wishes to search for the Nordic Sami Institute in Finnish, one keys in 'F' for 'Find' followed by 'FI Pohjoismainen saamelais', which should produce on the screen record no. 138. One can then key in 'N' for 'Next', which produces the question 'By number or field?'. If one types 'N' for 'Number', record no. 139 will be displayed; if one types 'F' for 'Field', the next record displayed will have a similar Finnish field.

The great advantage of TPED is that any of our records can be edited,

altered or deleted, or individual fields can be deleted, with great simplicity. One simply finds the record in question and keys in 'A' for 'Alter'. TPED then behaves like a word-processing program, and one can make any alterations, deletions or additions to the existing record without having first to delete it and then build it up again. In practice this often means that we can make changes to an existing record while speaking on the telephone with somebody in authority who says, for example, that such and such an institution has just changed its name in Norwegian or that the institution concerned has been abolished.

Clearly ADNOM is a project that must continue indefinitely, and it is also a project in which the database is constantly expanding. In view of the need for virtually unlimited storage space we have connected our Olivetti M24 as a terminal to the main computer at the University of Oslo, and this functions perfectly thanks to the communications program called KERMIT. We hope that at some time in the future it may be possible for translators to have online access to our database, but for the moment we are planning a new edition of the ADNOM glossary to be published by Universitetsforlaget in the course of 1987.

When ADNOM began in 1982, we had a card index in 'shoe boxes'. Today, thanks to Olivetti and the Norwegian Council for Technical Terminology, we have a computerised terminological database which has completely revolutionised our work. The standardisation of administrative terminology and nomenclature is a long and time-consuming process. We must often have several meetings with people in various ministries or directorates before agreement can be reached on a particular English translation equivalent. However, the task is much more rewarding when one has at one's disposal the benefits of modern computer technology, which in the long term will allow us to make our database available to a much wider public.

### REFERENCES

- 1. Norsk Dataordbok. (3rd revised ed.), Universitetsforlaget 1984.
- 2. ADNOM. (Norwegian English glossary), Universitetsforlaget 1984.
- 3. *TPED*. (program documentation), Håvard Hjulstad, Norwegian Council for Technical Terminology, Riddervolds gate 3, N-0258 Oslo 2.
- 4. Bokmålsordboka. Universitetsforlaget 1986.
- 5. Nynorskordboka. Del norske samlaget 1986.

# AUTHOR

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# **BRIEF SURVEY OF COMPUTER EQUIPMENT USED BY ADNOM**

ADNOM uses an Olivetti M24 with a 20 megabyte hard disk to store data in the form shown in Examples 1 to 4.

The program used is TPED (TermPostEditor = Term Record Editor) designed by Håvard Hjulstad at the Norwegian Council for Technical Terminology.

The Olivetti M24 is connected to the University of Oslo data network as a terminal, which means that in the relatively near future we hope translators will be able to access our files on line. Through Universitetsforlaget we do however publish the *ADNOM glossary* (ISBN 82 - 00 - 07351 - 3) as very many people like to have our data in the form of a book. The obvious advantage of the computerised database is that our records can be revised, updated or corrected immediately we receive new information.

Each record shows:

1. term in Norwegian Bokmål

2. term in Norwegian Nynorsk

3. term in English

4. internal project code

5. source of information

TPED allows us to insert a considerable number of language codes, which means that we can have fields for all the most relevant languages. For some records we have already inserted fields for Finnish and Sami.

TPED also has field codes for synonyms, antonyms, related terms, definitions, examples, etc.

The data files are stored in the following form:

ADNOM.DTA	random access file
ADNOM.TXT	sequential file
ADNOM.IXN	for indexing by record number
ADNOM.IXF	for indexing by field
ADNOM.FRM	for inserting the field codes

The files can be searched in any language for which there is a code in the form file. To search for the term *skoledirekør* in the random access file, one keys in

NB skoledirektør (i.e. the code for Bokmål and the term)

The screen then displays the record in full, in whatever languages and with whatever other information we have entered.

For all information concerning our data one can contact Brit Elin Førsund, who is responsible for entering and editing all records. Her address is Department of English, University of Oslo, P.O. Box 1003, N-0315 Oslo 3, Norway.

For all information concerning TPED one can contact Håvard Hjulstad at the following address: Norwegian Council for Technical Terminology, Riddervolds gate 3, N-0258 Oslo 2, Norway.

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THANKE NUMBER COOPCORTS
950) Rådet for Medisinsk Forskning
1801 - RMF
MB01k fork
MBOlk fork
NB03 medisins) forskning
NN00 Rådet for Medisinsk Forsking
NN01 RMF
NN01 RMF
NN03 medisinsk forsking
EN00 Council for Medical Research
NB10 Norges almenvitenskapelige forskningaråd
 TT83 A
TT83 A
TT83 NAVE Händbak om Fremmedopr, babegnatse, jan. 62
RECORD NUMBER 0000000719
NB00 Rådet for videregående opplæring
NB01 RVO
NB01k fork
NBOIk fork
NBO3 videregående opplæring
NN00 Rådet for videregående opplæring
NN01 RVQ
NN01k fork
NN03 videregående opplæring
EN00 National Council for Upper Secondary Education
NB10 Kirke- og undervisningsdepartementet
NB10 Skoleevdelingen
TTB3 A
TT93 Brev av 28/4-83
RECORD NUMBER 0000000001
NB00 amanuensis
NN00 amanuens
EN00 lecturer
            Addrivens:s
NBOI universitetälektor
NBOI universitetälektor
TTO3 D
TTO3 ADNOM
RECORD NUMBER 000000032
N290 Nordisk språksekretariat
NN90 Nordisk språksekretariat
EN90 Nordic Language Secretariat
F100 Pohjoismainen kielisihteeristä
TT82 A
TT93 Nordiska samarbetsorgan 1985:3
RECORD NUMBER 0000000037
NB00 Stor meddomsrett
NN00 Stor meddomsrett
EN00 Grand Composite Court
ENON Grand Composite Courts
NB30 lagmannsrett som i visse saker består av tre fagdommere og fire
domsmenn som sammen avgjør både skyldspørsmålet og straffeutmålingen
TT83 E
TT93 Utenriksdepartementet (översettelseskontoret)
RECORD NUMBER 000000151
N800 Fiskeridepartementet
NN00 Fiskeridepartementet
ENGO Ministry of Fisheries
NB03 department
TT93 Liste fra UD
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Example 1

READERD NUMBER - COUCOURSESS NROG Nordisk ministerråd NROG Nordisk ministerråd ENOG Nordic Council of Ministers Flog Pohjoismaiden ministerineuvosto TT83 A TT93 Nordiska samarbetsorgan 1985:3 RECORD NUMBER 000000138 NB00 Nordisk samlsk institutt NNGO Nordisk samlsk institutt ENGO Nordic Saml Institute SMGO Sámi instituhtta F100 Pohjoismainen saamelaisinstituutti T183 A TT83 A TT93 Brev fra Sámi institutita datert 9. januar 1986 RECORD NUMBER 0000001142 NB00 kulturstyre (komm) NN00 kulturstyre (komm) ENOG Municipal Committee for Cultural Affairs NB31 Et av hovedutvalgene i kommunen. Tilsvaren hovedutvalg for Hultur. E TT83 TT93 Benell, Babrielsen, Tolfsby: Terminologi innen lokalforvaltningen, 1984 RECORD NUMBER 000000545 NB00 Formann i Fagstyret NN90 Formann i Fagstyret EN00 Dean of Medicine NB10 Universitetet i Tromsø NB10 Fagområde medisin TT83 A TT93 Brev av 22/4-02 RECORD NUMBER 0000000547 NB00 formannskap NBOG formannskap ENGO Municipal Executive Board NB31 Kommunens øverste politiske organ under kommunestyret. TT83 E TT83 E TT83 Benell, Gabrielsen, Tolfsby: Terminologi innen lokalforvaltningen, 1984 RECORD NUMBER 000000120 NB00 Avdeling C: Statistikk og forsikringsmatematikk NB03 statistikk NB03 forsikringsmatematikk NN03 forsikringsmatematikk NN03 forsikringsmatematikk NN03 forsikringsmatematikk EN00 Section C: Statistics and Actuarial Science NB10 Universitetet i Oslo NB10 Matematisk institutt TT83 A TT83 Bray 23/2-82 TT93 Brev 23/9-82

Example 2

RECORD NUMBER 0000001378

NB00 Universitetet i Oslo NN00 Universitetet i Oslo EN00 University of Oslo F100 Oslon yliopisto TT83 A

RECORD NUMBER 0000001152

NB00 Universitetet i Bergen NN00 Universitetet i Bergen EN00 University of Bergen FI00 Bergenin yliopisto TT83 A TT93 Brevark fra Universitetet i Bergen

RECORD NUMBER 000000386

NB00 ungdomsskole NN00 ungdomsskole EN00 lower secondary school TT83 E TT93 ADNOM

#### RECORD NUMBER 0000001243

NB00 Grunnskoleloven NN00 Grunnskoleloven EN00 Compulsory Education Act. NB31 Lov av 13 juni 1969 om grunnskolen TT83 C TT93 ADNOM

RECORD NUMBER 000000002

NB00 vitenskapelig assistent NN00 vitskapeleg assistent EN00 assistant lecturer TT83 D TT93 AENCM

Example 3

RECORD NUMBER 000000003

NB00 forskningsstipendiat NN00 forskingsstipendiat EN00 research fellow TT83 D TT93 ADNOM

#### RECORD NUMBER 000000004

NB00 forskningsassistent NN00 forskingsassistent EN00 research assistant TT83 D TT93 ADNOM

#### RECORD NUMBER 000000349

NB00 Det historisk-filosofiske fakultetsbibliotek NN00 Det historisk-filosofiske fakultetsbibliotek EN00 Faculty of Arts Library NB10 Universitetet i Oslo TT83 A TT93 Brev fra UB i Oslo 15.4.86

#### RECORD NUMBER 0000001381

- NB00 Vestlandets Kunstakademi NB03 kunstakademi NN03 Vestlandets Kunstakademi NN03 kunstakademi DN00 National Academy of Fine Arts, Bergen, Norway
- TT83 A TT93 Srev fra Vestlandets Kunstakademi 24/11-81

#### RECORD NUMBER 0000000489

- NB00 Oldsakssamlingen/Vikingskipshuset NB03 Vikingskipshuset NR00 Oldsakssamlinga/Vikingskipshuset NR03 Vikingskipshuset EN00 University Museum of National Antiguities Viking Ship Museum NB10 Universitetet i Oslo TTR3 A TTP3 Brev av 28/5-82

**Example 4**