

## ANNEX B

### QUESTIONNAIRE

This questionnaire has been designed to enable me to write a report for WMO on the use of Forecaster Workstation Systems<sup>1</sup> in National Meteorological Centres. The purpose of the report is to give guidelines to countries which wish to invest in such systems and to try and identify the hidden costs, such as on going support, of purchasing or developing a system. When completed the report will be made available to you.

The final report of the CBS meeting in October 1998 states "Review and report on uses made of various workstations in NMHS's including such items as the costs, software and support. Identify areas of potential collaboration and standardisation".

Please complete the questions as fully as you can, if you have more than one Forecaster Workstation System please photocopy this questionnaire and fill in for each system. There is space at the end for any further comments you may like to make.

Please return the completed Questionnaire to me by 31<sup>st</sup> January 2000.

Thank you for your help.

Lynda Jones  
UKMO

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Please fill in the following details. These will not be part of the report but will be used for reference purposes only.

Organisation: \_\_\_\_\_

Country: \_\_\_\_\_

WMO Region: \_\_\_\_\_

Name: \_\_\_\_\_

Contact Details: \_\_\_\_\_

Date: \_\_\_\_\_

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<sup>1</sup> For this report a 'Forecaster Workstation System' is defined as any computer system that is dedicated to the display and manipulation of meteorological data for the purpose of producing weather forecasts.

**1. Does your organisation currently have a Forecaster Workstation System?**

No            Yes

If 'No' please go to question 21

**2. What hardware is this system on?**

Unix      (Please state operating system)      \_\_\_\_\_

PC        (Please state operating system)      \_\_\_\_\_

Other     (Please state)      \_\_\_\_\_

**3. Have you developed this system yourself (in-house)?**

No            Yes

**4. Please state the percentage of the system which is:**

\_\_\_% Free third party software      \_\_\_% Commercial third party software

\_\_\_% Written in house                \_\_\_% Other (please state) \_\_\_\_\_

**5. Does your workstation contain software applications provided by other NMHSs.**

No            Yes (please state both NHMSs and applications)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. Does your workstation contain software applications used in WMO training seminars (e.g. PCGRIDDS)?**

No            Yes (please state)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. What programming languages are used? (tick all that apply)**

'C'            'C++'    Fortran            Java

Other (please state) \_\_\_\_\_

**8. What programming tools are used? (tick all that apply)**

Software Configuration Management (please state) \_\_\_\_\_

Debugger (please state) \_\_\_\_\_

Other (please state) \_\_\_\_\_

**9. What is the purpose of the workstation? (tick all that apply)**

Visualisation of Meteorological Data      Producing Customer Products

Other (please state) \_\_\_\_\_

**10. What is the main use of the workstation?**

General Forecasting      Aviation Forecasting      Marine Forecasting

Long Range Forecasting      Severe Weather Monitoring and Forecasting

Other (please state) \_\_\_\_\_

**11. Can your workstation integrate the display and manipulation of satellite imagery, NWP data and meteorological observations?**

No      Yes (please give an example)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**12. Does your workstation include a forecast preparation tool?**

No      Yes

If 'No' please go to question 14

**13. Please tick all the functions this tool provides**

Manually added Graphics      Manually typed Text

First guess Graphics      First guess Text

**14. What database do you use?**

Own in-house database

Commercial Database (please specify) \_\_\_\_\_

**15. Do you use standard WMO formats (e.g. GRIB, BUFR)?**

No      Yes (please state) \_\_\_\_\_

**16. What other formats do you use (apart from WMO formats)?**

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**17. What data do you use on the system? (tick all that apply)**

Other NMHS's NWP models (please specify) \_\_\_\_\_

Own NWP global model                      Own local area NWP model

Own local satellite & radar data

Other satellite & radar data (please specify) \_\_\_\_\_

Observations from the GTS              Local observations

**18. What components make up your system and how many?**

Servers \_\_\_\_      PC \_\_\_\_      Workstations \_\_\_\_      Printers \_\_\_\_

Others \_\_\_\_\_

**19. Please provide estimated costs for acquiring your whole system (costs in \$US).**

**Hardware**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Operating system**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**General housekeeping**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Database**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Software**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**20. Please provide estimated costs for maintaining your whole system (costs in \$US).**

**Hardware Maintenance**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Operating system maintenance and upgrades**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**General housekeeping**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Database maintenance**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Software maintenance**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**Ongoing software development**

0	< 5,000	5,000 – 10,000	
10,000 – 100,000	100,000 – 500,000	500,000 – 1,000,000	>
1,000,000			

**21. Are you currently considering a new Forecaster Workstation System?**

Yes      No

If 'No' please go to question 28

**22. What hardware will this system be on?**

Unix      (Please state operating system)      \_\_\_\_\_

PC      (Please state operating system)      \_\_\_\_\_

Other      (Please state)      \_\_\_\_\_

**23. Will you be developing this system yourself (in-house)?**

Yes      No

If 'No' please go to question 25

**24. Why did you decide to go for an in-house system?**

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**25. Have you considered buying a system in?**

Yes      No

**26. How will you be acquiring this system?**

Complete system from another NMS (please state)

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Partial system from another NMS (please state)

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Complete system from a third party vendor (please state)

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Partial system from a third party vendor (please state)

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**27. Please detail your current working practise if you do not have a Forecaster Workstation System.**

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**28. Please provide information on why you are not using a Forecaster Workstation System i.e. cost, technical ability etc.**

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**29. Please provide any other information you think may be useful.**

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Thank you for completing this questionnaire, your answers will be used to compile a report for WMO.

Please return the completed questionnaire to:

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UNITED KINGDOM  
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