

Note on Economics and Statistic unit

Members of the Radio Research Advisory Committee

1. At the last meeting of the RRAC I took a Action Point to provide some further information to the Committee about the work of the Agency's Economics and Statistics Unit.
2. As promised, I have been in touch with Michael Hodson and he has kindly supplied to me hard copies of the slides that he used at the meeting where he gave his short presentation. These are attached to this note.
3. Also attached is a short statement that Michael has provided to me about the recent work of his Unit and the work that is currently being undertaken in the first part of the Financial Year.
4. This discharges the Action Point arising from the last meeting and I hope that colleagues find this helpful.

B.A MAXWELL
Director/RA3
14 May 2002

ECONOMICS AND STATISTICS UNIT: WORK IN Q3/4 FY2001/2 to Q1/2 FY 2002/3

Recent work in Q3/Q4 of FY2001/2

Advice

Provide economic advice on:

- The re-planning of the 450-470 MHz band. In particular assisted in the design of a questionnaire to obtain economic data on the costs and benefits of various re-planning options.
- A consultation document on spectrum trading, which has yet to be published.
- The Government's Response to the Review of Radio Spectrum Management 2002 by Professor Martin Cave.
- The value of the spectrum for mobile and broadcasting
- Regulatory Impact Assessments
- Performance measurement

Demand Studies

Initiated

- A Private Mobile Radio Demand Study
- A Satellite and Fixed Link Demand Study

Statistics

- Completed the Licensee Satisfaction Survey
- Collected statistics for the Spectrum Strategy and Independent Spectrum Review
- Manage management information system project

Management of the Mathematics Programme

Future Work in Q1/Q2 of FY 2002/3

Policy advice as required

Economic Impact Study

- Initiating the 2002 Study (This is our major project for 2002)

Demand Studies

- Analysing the results of the PMR survey
- Completing the Satellite and fixed Links Demand study

Statistics

- Collection of allocation and assignment data
- Complete project on management information system
- Initiate next Licensee Satisfaction Survey

Management of the Mathematics Programme

(Viewgraphs)

Economics and Statistics Unit

Advice

Economic Impact

Demand Studies

Statistics

Spectrum trading
Spectrum Pricing
Spectrum Strategy
Spectrum Review
Spectrum Use
Auctions

Re-planning

Regulatory Impact

Statistics

Manage surveys

Calculate
Producer
Surplus
Project
Integration

PMSE
Satellite
PAMR/Data
Services
PMR

Licensee
Satisfaction
Survey
Data
Warehouse

Mathematics
Programme

HM Treasury Appraisal and Evaluation Guidelines

Efficiency Don't invest if the cost outweigh the benefit

Market failure Only invest if there is a "market failure"

Additionality Don't invest if business would

Cost effectiveness Don't invest if the ratio of net benefits to public cost is low

Viability Don't invest to help firms that aren't viable.

Source: Appraisal and Evaluation in Central Government, Annex E, HM Treasury, 1997

Economically Interesting Areas of Radio Research

Interference An example of an “externality” and a cause of market failure

Indivisibilities Is there a minimum required size, e.g. of spectrum? Again, a source of market failure.

Channel assignment Why do meta-heuristic algorithms produce more efficient spectrum use? Might indicate reasons for market failure.

Source: Appraisal and Evaluation in Central Government, Annex E, HM Treasury, 1997