

PN-ABN-998  
ISN 82157



# **HEALTH SECTOR FINANCING PROJECT**

Ministry of Health  
Republic of Indonesia

CONSULTANT REPORT SERIES



---

A USAID-Sponsored Project in Collaboration with  
The International Science and Technology Institute, Inc.

**PREPARATION FOR FOCUSED ASSESSMENTS:  
REVISION OF TERMS OF REFERENCE AND  
PLANNING FOR STUDY IMPLEMENTATION**

**# 6**

**Author:**

**Jonathan D. Quick, MD**

**December 1988**

**Prepared for:**

**Health Sector Financing Project  
Ministry of Health  
Republic of Indonesia**

**Under USAID Contract No. ANE-0354-C-00-8030-00**

**Prepared by:**

**International Science and Technology Institute, Inc.  
Suite 800  
1129 20th Street, NW  
Washington, D.C. 20036  
Tel: (202) 785-0831  
Telex: 272785 ISTI UR  
FAX: (202) 223-3865**

Section 3 of this report, Summary of Individual Terms of Reference, summarizes the results of meetings held 22 August to 31 August 1988 chaired by the Director, Pharmaceutical Component, Project Implementation Office and involving the P.O.M. Activity Coordinators, the Domestic Consultant group, and External Consultant (JQ). The Detailed Terms of Reference for the Focussed Assessments (HSFP-p.002, Rev.1) are being prepared in Bahasa Indonesia by the Activity Coordinators with advice from the Domestic Consultant Group. The assistance and advice of Dr. R.M. Arbanto Tjondrowardojo, Dit. Jen. Binkeemas and dr. Nelwan are gratefully acknowledged.

Specific recommendations in this report regarding planning and implementation of focussed assessments, technical review and award of focussed assessment contracts, technical assistance needs, and other pharmaceutical component topics represent primarily the technical view of the External Consultant and do not necessarily represent the views of the other contributors. The author accepts responsibility for any errors of fact or interpretation.

#### **NOTE ON TERMINOLOGY**

In this report and in the Terms of Reference for the Focussed Assessments, the term "implementor" is used to refer to the organizations which are awarded the contracts for the individual Focussed Assessments. The term "consultant" refers to individual domestic and external consultants who are engaged to assist all parties (PIO/P, Activity Coordinators, and implementors) in the design, implementation, and analysis of the Focussed Assessments.

The term "working group" is used to refer to the Director, PIO/P, the PIO/P Activity Coordinators, the domestic consultants, and the international consultant who were involved in the preparation of the Terms of Reference and the 22 to 31 August meetings.

## TABLE OF CONTENTS

	Page
Summary .....	i
Abbreviations, Acronyms, and Terms .....	v
1. The Focussed Assessments Contents -- Overview .....	1
2. Planning and Implementing Focussed Assessments .....	7
3. Summary of Individual Terms of Reference .....	12
4. Technical Review and Award of Focussed Assessment Contracts .....	20
5. Other Pharmaceutical Component Topics .....	22
Annexes .....	24

## SUMMARY

### 1. CONTENTS OF FOCUSSED ASSESSMENTS

The Pharmaceutical Component of the HSFP has two principle objectives within its overall goal of optimizing the use of funds for pharmaceuticals:

- (1) Enhanced efficiency of drug management through improvements in planning, procurement, and distribution which result in greater drug availability and quality; and
- (2) Enhanced effectiveness of drug use through efforts to promote rational use of drugs and discourage irrational prescribing, dispensing, and patient use of drugs.

The overall project design calls for the development of individual project components (Social Financing, Hospitals, Pharmaceuticals, and Policy) through a systematic process of assessment, intervention design, field tests, evaluation, intervention package design, demonstration, and evaluation.

Through meetings in April, May, and June, 1988 a set of five studies were identified within the Pharmaceuticals Component to objectively assess the current situation with respect to drug management and drug use in the public sector in order to recommend a range of potential interventions which are likely to be cost-effective:

- (1) Drug Use Study (DUS)
- (2) Drug Management Study (DMS)
- (3) Social Marketing Study (SMS)
- (4) Manpower Study (MPS)
- (5) Secondary Data and Bibliography Study (ADSP)

The outlines for draft terms of reference for each study were developed during a workshop 17-18 June 1988. These were further developed during meetings held 22-31 August 1988. The terms of reference have evolved considerably during the course of the discussions; with a modest amount of additional editorial work, these Terms of Reference should be sufficiently specific and practical to allow them to be put out for tender.

Questions to be Considered -- In finalizing the Terms of Reference and during early study planning by implementors and consultants, several questions need to be considered:

- Overlap & Coordination with the Social Financing and Hospital Components of HSFP
- Collection of Baseline Data during the Focussed Assessment
- Sample size which was considered at length; as a result of this discussion, it was recommended that, for appropriate studies, bidders be asked to submit two cost proposals, one for the full sample of perhaps 15 or 16 Kab/Kot and one for a smaller sample of 6 kabupaten and 3 kotantadya.

- o Descriptive data of health facilities and communities need to be collected, and it has yet to be established which of the five studies will do this.

Topics Not Addressed by the Five Studies -- Within the available time and budget, not all possible topics could be considered by the studies. Topics not currently directly addressed by the five studies include the following:

- Implications of Repelita V for drug management and drug use
- Implications of decentralization for drug management and use activities
- Private sector drug use patterns and influences
- Kader and Pos Yandu level drug supply and drug use
- Drug Management and Use at Type A and Type B hospitals
- Patient drug fees and other topics related to establishment of drug revolving funds and drug sales schemes
- Drug use patterns in private voluntary health services such as mission hospitals.

In addition, the following topics will be pursued further only if analysis of the first five studies suggests it would be useful:

- Inpatient expectations, attitudes, and practices with respect to drugs
- Curricula for formal (pre-service) education on the essential drug concept, drug management, and rational drug use for doctors, pharmacists, nurses, and other health workers.
- Accuracy of Puskesmas diagnoses and the extent to which clinical diagnostic criteria are used to arrive at diagnoses in a consistent manner.

Some of these topics may yet be included in the five focussed assessments. In addition, a limited number of special studies conducted later in the project can address important topics not addressed in the five Focussed Assessments and new topics identified during the Focussed Assessments.

## 2. PLANNING AND IMPLEMENTING FOCUSED ASSESSMENTS

Revised Schedule of Activities -- A revised schedule of activities calls for announcement of the bid by mid-September, receipt of all bids by late October, award of contract by mid-November, and detailed study planning in November and early December. The five studies would be completed by late June 1989, a final integrated report would be complete by late July 1989, and planning for intervention testing would be completed by December 1989.

Contracting Considerations -- A pre-RFP workshop on 30 August 1988 held by the PIO/P was attended by 22 people representing 10 of 13 organizations which had pre-qualified for the studies. Following U.S.A.I.D. requirements, proposals will be evaluated first on the basis of technical quality. Because final levels of effort will probably not be established until after the detailed design effort in November and December, it is important that flexibility to adjust individual study budgets be maintained. Two options have been identified thus far, one an IQC-type arrangement and the other a two-contract arrangement.

Guidelines for confidentiality in the bid evaluation process should be understood by everyone involved in the process. Consultants whose organizations have submitted bids or who have direct links to organizations which have submitted bids will, of course, be excluded from assisting the PIO/P in the selection process.

Budget -- The estimated budget for the five studies is 318,000,000 Rupiah (US\$ 185,000). This budget has not yet been revised or reconsidered following revision of the detailed Terms of Reference by the working group. It is likely that budget requirements will increase unless the scope of some studies is reduced.

Technical Assistance Needs -- A total of eight person-months of external short-term technical assistance has been identified for the next twelve months to assist in the design, implementation, and analysis of study results. Comparable or greater amounts of domestic short-term assistance may also be needed. These estimates are tentative, pending determination of skills and arrival dates for long term advisors.

### 3. SUMMARY OF INDIVIDUAL TERMS OF REFERENCE

Drug Use Study (DUS) -- Concerned primarily with prescribing patterns at the R.S. Kabupaten (Regency Hospitals) and the Puskesmas, the DUS will analyze and characterize the prescribing patterns; identify regional, provider, insurance (ASKES, non-ASKES) and other differences in prescribing patterns; compare actual prescribing with standard treatments; collect representative prescription data which can be used for later project evaluation; confirm the need for communicating specific drug use messages (eg., appropriate use of injections and antibiotics); identify some of the factors which influence prescribing; and suggest the most potentially cost-effective interventions to improve prescribing.

Drug Management Study (DMS) -- The DMS will assess objectively and quantitatively how effectively the current system is performing with respect to planning, procurement, and distribution; determine where are the key constraints which affect supply system performance; to the extent possible, determine why the constraints and problems exist; and suggest the most potentially cost-effective interventions to improve drug management.

Social Marketing Study (SMS) -- The SMS will attempt to determine how patients use and mis-use drugs (eg., level of non-compliance, amount of sharing of prescriptions); determine the key factors which influence consumers and health personnel in the use and mis-use of drugs; collect information needed to identify interventions which should be tested in specific areas; suggest the intervention strategies which are most likely to be cost-effective in promoting rational use of drugs; make specific recommendations for communications development, including target groups, messages, channel, and so forth; and perhaps suggest a monitoring strategy for social marketing efforts.

Manpower Study (MPS) -- The MPS will conduct a survey to prepare recommendations on manpower requirements needed to accomplish all drug management tasks at all levels and prepare recommendations for training and development of managers.

Secondary Data and Bibliography Study (ADSP) -- The ADSP will collect and review relevant documents and secondary data needed to design and implement the four field assessments; establish a library of project-generated data and reports; provide data and literature needed for integrated evaluation and review of the four field studies; provide data and information for designing and testing of interventions; and provide information support for project management in implementing the HSFP Pharmaceutical Component.

#### 4. TECHNICAL REVIEW FOR AWARD OF FOCUSSED ASSESSMENT CONTRACTS

Technical Reviewers -- In addition to calling on members of the expert Steering Committee to review the proposals, it is suggested that local and external consultants with special expertise in individual areas be engaged for a period of one to two weeks to assist in the review process. Specific recommendations are included in this report.

Criteria for Bid Evaluation -- Criteria are suggested for bid evaluation based on organizational expertise, proposed study methods, experience of proposed staff, and quality of proposal. In addition, specific criteria for individual studies are suggested.

#### 5. OTHER PHARMACEUTICAL COMPONENT TOPICS

Recruitment of Long-Term Domestic Consultants -- Given the nature of the component and the balance of skills already available to the component, it is suggested that a vigorous effort be made to recruit a publicly-minded domestic long-term consultant with considerable marketing experience in the Indonesian pharmaceutical industry. Individuals with such qualifications have proven invaluable to other public sector efforts to promote rational drug use.

PIO/P Study Visit -- Suggestions are included for possible sites to include in the proposed PIO/P study visit.

SWEDIS Software -- It has been proposed that the project support the purchase of SWEDIS software, a multi-function pharmaceutical management software package developed under the National Board of Health and Welfare, Sweden. Trial use of SWEDIS under the project is warranted, but its intended use in the Indonesian context and special installation requirements should be developed in advance of making specific procurement arrangements.

## **ABBREVIATIONS, ACRONYMS, AND TERMS**

<b>ADSP</b>	<b>Secondary Data and Bibliography Study</b>
<b>DMS</b>	<b>Drug Management Study</b>
<b>DUS</b>	<b>Drug Use Study</b>
<b>Kabupaten</b>	<b>Rural Regency</b>
<b>Kotamadya</b>	<b>Urban Regency, Municipality</b>
<b>MPS</b>	<b>Manpower Study</b>
<b>PIO/P</b>	<b>Project Implementation Office/Pharmaceuticals</b>
<b>Puskesmas</b>	<b>Health Center</b>
<b>SMS</b>	<b>Social Marketing Study</b>

# 1. THE FOCUSED ASSESSMENTS CONTENTS -- AN OVERVIEW

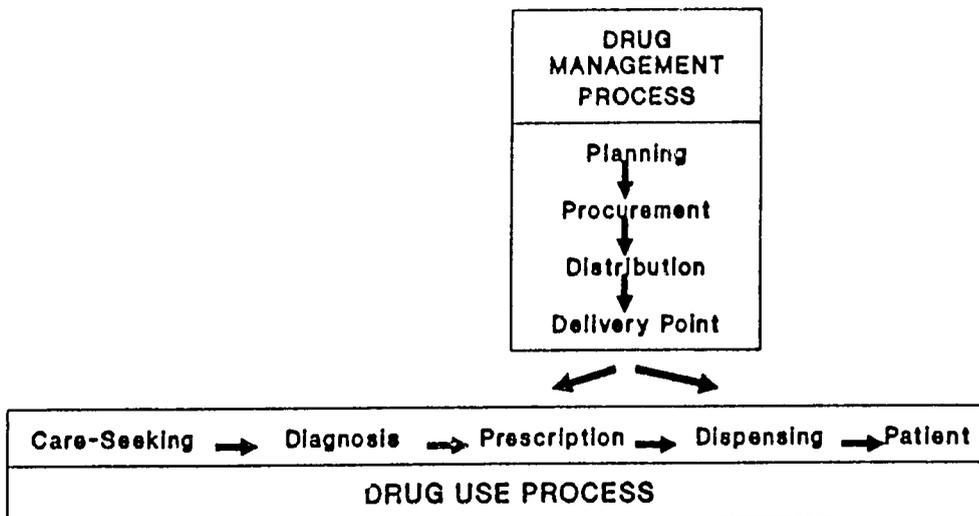
## 1.1. Development of the Terms of Reference for Focussed Assessments

The Pharmaceutical Component of the HSFP has two principle objectives within its overall goal of optimizing the use of funds for pharmaceuticals:

- (1) Enhanced efficiency of drug management through improvements in planning, procurement, and distribution which result in greater drug availability and quality; and
- (2) Enhanced effectiveness of drug use through efforts to promote rational use of drugs and discourage irrational prescribing, dispensing, and patient use of drugs.

The relationship between the drug management process and the drug use process, as well as the main elements in each process are shown in Figure 1, below.

Figure 1  
HSFP Pharmaceuticals Component  
OPTIMIZING DRUG MANAGEMENT AND DRUG USE



The overall project design calls for the development of individual components (Social Financing, Hospitals, Pharmaceuticals, and Policy) through a systematic process of assessment, intervention design, field tests, evaluation, intervention package design, demonstration, and evaluation. The Pharmaceutical Component is entering the phase of assessment in which the four major steps are:

- (1) Focussed Assessment Studies
- (2) Integration of Focussed Assessments
- (3) Preparation for Formulation of Interventions
- (4) Intervention Formulation

Through meetings in April, May, and June, 1988 a set of five studies were identified for the assessment phase of the project. Collectively, these studies are meant (1) to objectively assess the current situation with respect to drug management and drug use in the public sector, (2) to identify the key constraints and problems, (3) to determine wherever possible the main causes for these constraints and problems, and, (4) based on this assessment, recommend a range of potential interventions which are likely to be cost-effective. From among these recommendations a set of interventions will be developed and field tested during the next phase of the project.

The five Focussed Assessment studies are:

- (1) Drug Use Study (DUS)
- (2) Drug Management Study (DMS)
- (3) Social Marketing Study (SMS)
- (4) Manpower Study (MPS)
- (5) Secondary Data and Bibliography Study (ADSP)

The DMS will contribute primarily to the development of interventions to improve drug management. The DUS and SMS will contribute to the development of interventions to improve drug use. The MPS will consider staff involved in both drug management and drug use; therefore, the results from this study should contribute to intervention development in both areas. Finally, the ADSP study will support all four field studies through the development of a document and data library/information center.

The relationships of the four field studies to the drug management and drug use processes are shown in Figure 2.

The draft Terms of Reference for each study were developed during a workshop on 17-18 June 1988. These were further developed during meetings held 22-31 August 1988. The Terms of Reference have evolved during the course of the discussions and are now generally quite practical and specific in their content (Figure 3).

Figure 2

### HSFP Pharmaceuticals Component RELATIONSHIP OF FOCUSSED ASSESSMENTS TO DRUG MANAGEMENT AND USE

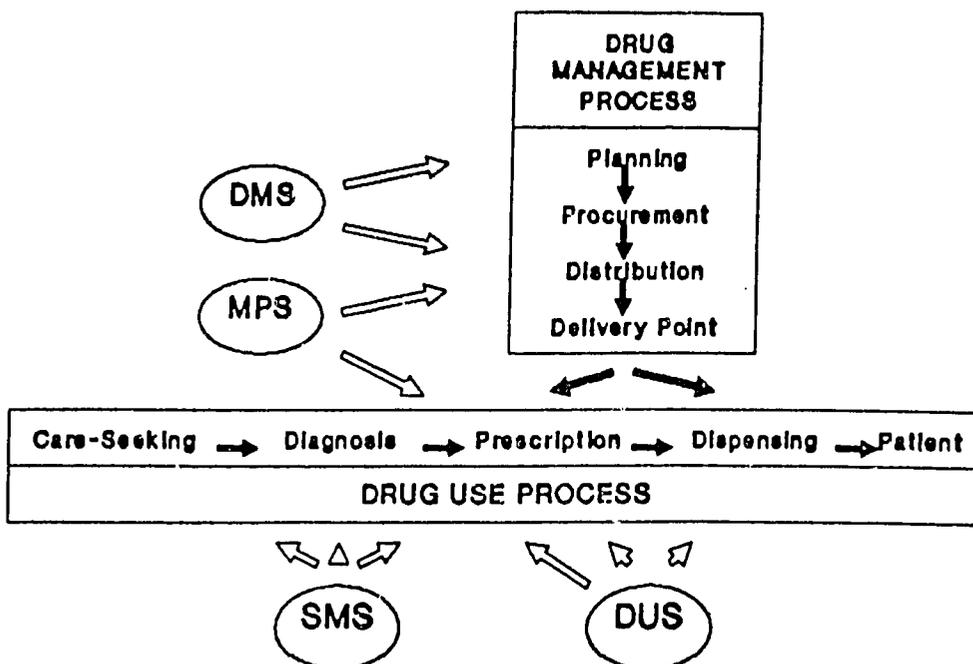
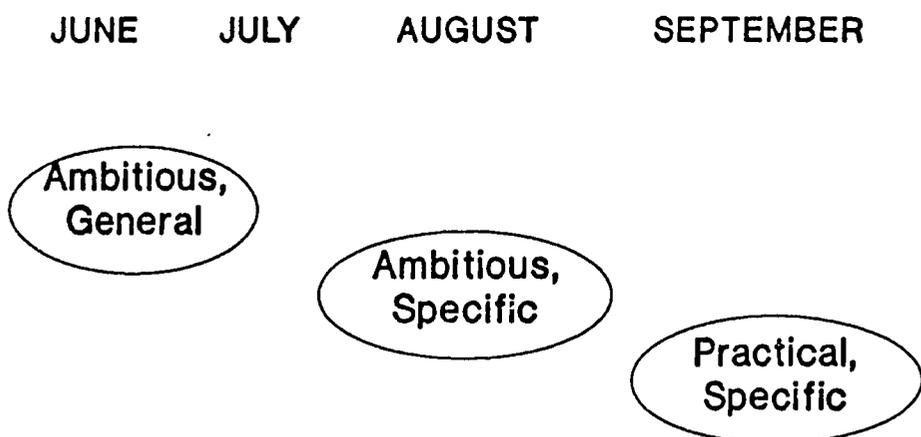


Figure 3

### HSFP Pharmaceutical Component EVOLUTION OF THE FOCUSSED ASSESSMENTS



1.2. Possible Constraints and Potential Interventions in Drug Management and Use

To help put the five studies in perspective and to assure that key questions had not been omitted from the proposed package of studies, the August working meetings generated lists of possible constraints and potential interventions in the areas of drug management and drug use. This exercise revealed the need for additions to each of the Focussed Assessments. A similar exercise was also carried out individually for each study.

The results of the discussion of possible constraints and potential inventions are included in Annexes B.1. and B.2.

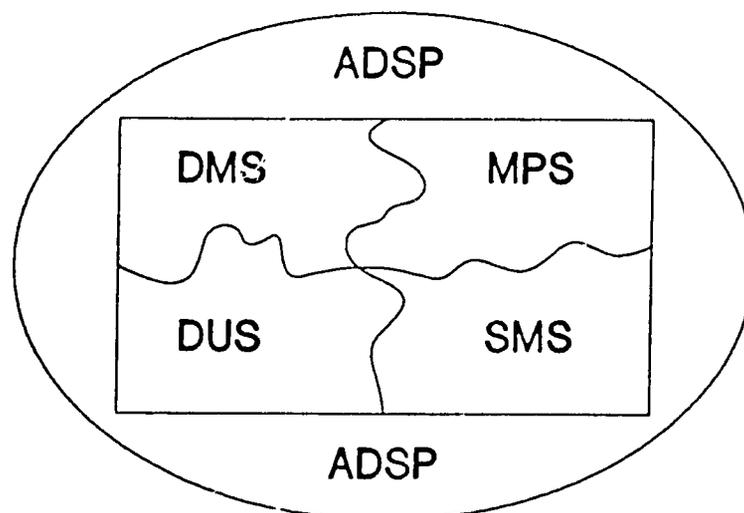
1.3. Coordination of the Five Studies

In discussing the specific objectives and contents of the five studies, the working group frequently found areas of potential overlap as well as areas in which one study will be highly dependent on another study for key information. For this reason it will be important for the implementors, the PIO/P, the Activity Coordinators, and the consultants to meet frequently starting from the award of the contracts, through the formulation of study designs, field testing, revision, and final execution of the studies.

As Figure 4 suggests, the studies form inter-locking pieces in a puzzle. By the end of the assessment period, there should be a completed picture of drug management and use, with as few holes as possible. The ADSP provides the supportive information framework for all of the studies.

Figure 4

**THE FOCUSSED ASSESSMENT PUZZLE:  
Studies Must Complement Each Other**



**DMS** ▪ Drug Management Study

**MPS** ▪ Manpower Study

**DUS** ▪ Drug Use Study

**SMS** ▪ Social Marketing Study

**ADSP** ▪ Secondary Data Study

#### 1.4. Questions to be Considered

In finalizing the Terms of Reference and during early study planning by implementors and consultants, several questions need to be considered:

Overlap & Coordination with the Social Financing and Hospital Components of HSFP -- Several of the studies, include MPS, DMS, and DUS, have potential areas of overlap with other components of the HSFP. These areas of overlap and opportunities for coordination of assessments should be discussed before final study designs and contracts are established.

Collection of Baseline Data -- Should some of the studies gather baseline data for later project evaluation efforts? Currently, only the DUS is specifically charged with the collection of baseline data, although some of the DMS and MPS data could be considered baseline data if collected with this purpose in mind.

Sample size -- The working group gave considerable attention to the question of the number of kabupaten/kotamadya to be included in the studies. The provincial total of six appeared to be fixed. Within this framework, several options were considered, including samples of 1 or 2 kabupaten plus 0 or 1 kotamadya from each province. The following advantages and disadvantages of larger numbers of Kab/Kot were identified:

##### Advantages of More Kab/Kot:

- Allows one to see the degree and pattern of variation in performance and conditions among Kab/Kot and among the provinces.
- Adds to the credibility and validity of the studies.
- Allows comparisons among areas which help identify the differences in levels of supply system performance and prescribing quality.
- Potentially reduces the impact of bias in sample selection.

##### Disadvantages of More Kab/Kot:

- More expensive
- More time consuming
- Larger sample sites can complicate the analysis
- Larger studies can lead to "surveyor fatigue" and a drop in quality if there is a limited number of qualified surveyors for a particular study.

As a result of this discussion, it was recommended that, for the DMS and DUS studies, bidders be asked to submit two cost proposals, one for the full sample of perhaps 15 or 16 Kab/Kot and one for a smaller sample of 6 kabupaten and 3 kotamadya.

Sample Selection -- The six provinces were chosen purposively according to development and project criteria. Kabupaten and kotamadya were chosen randomly. A tentative selection of Puskesmas (two per regency) was also made, but the process and criteria for this were not agreed upon in advance. Puskesmas selection should be reviewed.

Descriptive data of health facilities and communities -- It has yet to be established which study will gather background information (much of it available centrally) on population, distances, numbers of patients treated, and so forth.

### 1.5. Topics Not Addressed by the Five Studies

Within the available time and budget, not all possible topics could be considered by the studies. Therefore, some topics of potential relevance have not been included in this phase of project. Some have not been considered simply because the working group has not had the opportunity to address them. Topics not currently directly addressed by the five studies include the following:

- Implications of Repelita V for drug management and drug use
- Implications of decentralization for drug management and use activities
- Private sector drug use patterns and influences
- Kader and Pos Yandu level drug supply and drug use
- Drug Management and Use at Type A and Type B hospitals
- Patient drug fees and other topics related to establishment of drug revolving funds and drug sales schemes
- Drug use patterns in private voluntary health services such as mission hospitals.

In addition, several topics were considered for inclusion in the study, but were deferred pending results from the five Focussed Assessments. The following topics will be pursued further if analysis of the first five studies suggests it would be useful:

- Inpatient expectations, attitudes, and practices with respect to drugs
- Curricula for formal (pre-service) education on the essential drug concept, drug management, and rational drug use for doctors, pharmacists, nurses, and other health workers.
- Accuracy of Puskesmas diagnoses and the extent to which clinical diagnostic criteria are used to arrive at diagnoses in a consistent manner.

Important topics not addressed in the five Focussed Assessments and new topics identified during the Focussed Assessments can be considered in a small number of limited special studies to be planned and carried out after the integrated review of the Focussed Assessment results. The Focussed Assessments are retrospective or cross-sectional in nature. If it is found that there are key questions that require prospective or longitudinal study, these can also be addressed through the special studies.

## 2. PLANNING AND IMPLEMENTING FOCUSED ASSESSMENTS

### 2.1. Revised Schedule of Activities

Table I contains the original implementation schedule drafted in June, 1988 and the schedule which was revised as a result of working group discussions. The schedule calls for a major detailed planning and pre-testing activity in late November through mid December, 1988 involving the selected implementors, the PIO/P and Activity Coordinators, and consultants.

### 2.2. Contracting Considerations

Through an informal pre-qualification effort carried out in July and August, thirteen local organizations were identified as possible bidders for the four field studies. A pre-RFP workshop on 30 August 1988 held by the PIO/P was attended by 22 people representing 10 of these organizations. Based on this turnout and the areas of interest of these organizations, it is estimated that a total of 20 to 24, and perhaps up to 30 proposals will be received for the four field studies.

Following U.S.A.I.D. requirements, proposals will be evaluated first on the basis of technical quality. Because final levels of effort cannot be established until after the detailed design effort in November and December, it is important that flexibility to adjust individual study budgets be maintained. Two options have been proposed; these need to be reviewed and acted upon by the PMU and USAID:

(1) IQC-type contract, in which the implementor is selected based on technical qualifications and budget format and rate schedule are established in the contract. The actual levels of effort and final budget would therefore be specified by individual work/task orders.

(2) Signing of two contracts with each implementor. The first would be for participation in the process of detailed study design with the PIO/P and consultants. The second would be for the implementation of the study and would be based on the results of the detailed planning work.

The project is in the process of establishing procurement procedures. As the Director of the PIO/P becomes familiar with these procedures, procurement should proceed accordingly.

Guidelines for confidentiality in the bid evaluation process should be understood by everyone involved in the process. Consultants whose organizations have submitted bids or who have direct links to organizations which have submitted bids will, of course, be excluded from assisting the PIO/P in the selection process.

TABLE 1

## HSFP Pharmaceutical Component

## TIME SCHEDULE FOR FOCUSED ASSESSMENTS

ACTIVITIES & SCHEDULE (HSFP-P.002/1, Rev. 1)		REVISED ACTIVITIES & SCHEDULE (30 August 1988)	
ACTIVITIES	SCHEDULE	ACTIVITIES	SCHEDULE
I. Formulation of TOR for each study	June 88	I. Formulation of TOR for each study	June 88-Aug 88
II. Tender		II. Tender	
1. Prequalification implementors	July-August 88	1. Prequalification implementors	July-August 88
2. Invitation to Bid	29 August 88	2. Invitation to Bid	21 September 88
3. Closing Date	24 September 88	3. Closing Date	22 October 88
4. Selection of Implementors	30 September 88	4. Selection of Implementors	19 November 88
		5. Signing of Contract	26 November 88
III. Preparation of Studies		III. Preparation of Studies	
A. Study Visit	October 88	A. Study Visit	early October 88
B. Preparation of studies		B. Preparation of studies	
1. Formulation of design, protocol, instrument	October 88	1. Study Planning workshop with implementors, consultants, PIO, AC	29-30 November 88
2. Mini workshop	26-28 October 88	2. Formulation of design, protocol, instrument, pre-testing	28 Nov - 21 Dec 88
3. Revision of design, protocol, and instrument	30 October 88	3. Workshop to review designs	16-17 December 88
4. Field Test	November 88	4. Revision of design, protocol, and instrument	Dec 88 - Jan 89
5. Extended Workshop	late November 88	5. Field Test	January 89
6. Final revision of design, protocol, and instrument	end November 88	6. Twice-monthly Meetings: implementors, PIO staff, consult	January - February
C. Training of Study Teams	December 88	7. Workshop for Final Revisions	late January 89
D. Preparation Study Execution	Nov-Dec 88	8. Final revision of design, protocol, and instrument	early February 89
		C. Training of Study Teams	February 89
		D. Preparation Study Execution	Nov 88 - Feb 89
IV. Studies		IV. Studies	
1. Data Collection	Jan-Feb 89	1. Data Collection	Mar - April 89
2. Data processing & analysis		2. Data processing & analysis	
a. Data entry	Jan-Mar 89	a. Data entry	Mar-May 89
b. Analysis & evaluation	Mar 89	b. Analysis & evaluation	May 89
c. Workshop for individual studies	early April 89	c. Workshop for individual studies	early June 89
d. Final report individual studies	late April 89	d. Final report individual studies	late June 89
3. Integrated review of all studies	early May 89	3. Integrated review of all	early July 89
4. Integrated Workshop I	mid May 89	4. Integrated Workshop I	mid July 89
5. Final Integrated Report	late May 89	5. Final Integrated Report	late July 89
V. Preparatory Stage for Formulation of Interventions		V. Preparatory Stage for Formulation of Interventions	
1. Review of Workshop I recommendations; preparation intervention formulation & specific studies	June-August 89	1. Review of recommendations of Workshop I and preparation of intervention formulation &	August-October 89
2. Comparative Study	June-August 89	2. Comparative Study	August-October 89
3. Integrated review of Study	early Sept 89	3. Integrated review of Study	early November 89
4. Integrated Workshop II	late Sept 89	4. Integrated Workshop II	late November 89
5. Final Report	October 89	5. Final Report	December 89

### 2.3. Budget

The preliminary study budget prepared by the PIO/P in June 1988 is presented in Table 2. This budget has not yet been revised or reconsidered following revision of the detailed Terms of Reference by the working group. It is likely that budget requirements will increase unless the scope of some studies is reduced.

### 2.4. Technical Assistance Needs

Table 3 summarizes tentative technical assistance needs for the Focussed Assessments. Because of other project planning meetings, this schedule had not yet been reviewed with the Director, PIO/P at the time of this writing.

Specific requirements for Technical Review of Proposals and suggested candidates are considered in section 4.1. Annex A contains draft terms of reference for external technical assistance anticipated over the next six months.

Additional domestic short-term assistance will be determined with the Director, PIO/P based on project requirements. Requirements for domestic and external assistance are likely to change as the skills and availability of long-term advisors are determined and as the capacity of Focussed Assessment Implementors becomes known.

TABLE 2  
 HSFP Pharmaceutical Component  
 PRELIMINARY BUDGET FOR FOCUSED ASSESSMENTS

	DUS	DMS	SMS	MPS	ADSP	TOTAL
Thousands of Rupiah						
Study Design	10 000	10 000	10 000	10 000	12 000	52 000
Travel					5 000	
Supplies					7 000	
Data Collection	45 000	26 300	45 000	15 000	10 000	141 300
Data Entry & Analysis	18 000	10 000	17 500	12 000	21 250	78 750
					11 250	
					10 000	
Workshop	7 000	5 000	7 500	5 000		24 500
Other	5 000	3 700	6 000	3 000	3 750	21 450
<b>TOTAL</b>	<b>85 000</b>	<b>55 000</b>	<b>86 000</b>	<b>45 000</b>	<b>47 000</b>	<b>318 000</b>
U.S. Dollars @ US \$ 1.00 = 1 700 Rupiah						
Study Design	5 882	5 882	5 882	5 882	7 059	30 588
Travel					2 941	
Suppliers					4 118	
Data Collection	26 471	15 471	26 471	8 824	5 882	83 118
Data Entry & Analysis	10 588	5 882	10 294	7 059	12 500	46 324
					6 618	
					5 882	
Workshop	4 118	2 941	4 412	2 941		14 412
Other	2 941	2 176	3 529	1 765	2 206	12 618
<b>TOTAL</b>	<b>50 000</b>	<b>32 353</b>	<b>50 588</b>	<b>26 471</b>	<b>27 647</b>	<b>187 059</b>

ABBREVIATIONS:

- DUS = Drug Use Study
- DMS = Drug Management Study
- SMS = Social Marketing Study
- MPS = Manpower Study
- ADSP = Secondary Data and Bibliography Study

**TABLE 3**  
**HSFP Pharmaceutical Component**  
**ANTICIPATED TECHNICAL ASSISTANCE NEEDS FOR FOCUSED ASSESSMENTS**

ACTIVITIES	APPROXIMATE DATES	ANTICIPATED TECHNICAL ASSISTANCE NEEDS				
		DUS	DMS	SMS	MPS	ADSP
		Type of Consultant (number of weeks)				
Secondary Data Review, Phase I (information for study implementors)	Sept - Nov 88					D-STC
Technical Review of Proposals	22 Oct-5 Nov 88	E-STC (2)	E-STC (2)	L-STC (1-2)	L-STC (1-2)	TBD
Formulation of Design, Protocols, Instruments, Pre-Testing, Revision	21 or 28 Nov to 17 or 21 Dec 88	E-STC (4)	E-STC (4)	E-STC (4)	D-STC	TBD
Study Implementation & Analysis of Results	Jan - June 89	E-STC (4)	E-STC (4)	E-STC (4)	D-STC	
Formulation of Interventions for Testing	July - November 8	TBD	TBD	E-STC (4)	TBD	

**ABBREVIATIONS:**

DUS = Drug Use Study  
DMS = Drug Management Study  
SMS = Social Marketing Study  
MPS = Manpower Study  
ADSP = Secondary Data and Bibliography Study

D-STC = Domestic Short-Term Consultant  
E-STC = External Short-Term Consultant  
L-STC = Local Short-Term Consultant (national or expatriate)

TBD = To Be Determined

**NOTE:** Additional domestic short-term assistance to be determined with Director, PIO/P based on project requirements and the skills and availability of long-term consultants.

### 3. SUMMARY OF INDIVIDUAL TERMS OF REFERENCE

#### 3.1. Drug Use Study (DUS)

Study Objectives -- The Drug Use Study is a clinical study concerned primarily with prescribing patterns at the R.S. Kabupaten (Regency Hospitals) and the Puskesmas. Since the Puskesmas Pembantu are generally staffed by the same providers who staff the Puskesmas, the study will not look specifically at Puskesmas Pembantu prescribing.

The objectives of the study are to:

- (1) Analyze and characterize the prescribing patterns at Puskesmas and R.S. Kabupaten.
- (2) Identify regional, provider, insurance (ASKES, non-ASKES) and other differences in prescribing patterns; compare actual prescribing with standard treatments.
- (3) Collect representative prescription data which can be used as baseline data for later project evaluation, to confirm the need for communicating specific drug use messages (eg., appropriate use of injections and antibiotics) for intervention site selection, and as "attention-getting" data for province-specific or kabupaten-specific interventions.
- (4) From observational and interview data, identify some of the factors which influence prescribing. (Other factors to be identified in SMS.)
- (5) Based on this understanding of the problems, suggest the most potentially cost-effective interventions to improve prescribing.

Methods and Locations -- The study will be a one-year retrospective study, the period for which will be determined in conjunction with the Drug Management Study. It will collect the following types of data:

Outpatient prescribing (Puskesmas and R.S. Kabupaten) -- from patient card, register, or prescription pad; for a random sample of all diagnoses information will be collected on patient age and sex; provider; number of return visits in same episode; insurance status; diagnoses; and quantity and type of drugs given.

Inpatient prescribing (R.S. Kabupaten) -- from patient cards, nurses' drug logs, daily records or other available records for diagnoses selected on the basis of reviewing hospital morbidity pattern reports.

Classification of diseases -- for both outpatient and inpatient studies, the coding system for recording and reporting diagnoses will be reviewed to help assess the reliability of coded diagnoses.

Inpatient record-keeping and drug administration -- as part of data collection for in-patient prescribing an informal analysis of inpatient record-keeping and drug administration practices will be conducted.

The study will collect data at the following locations:

R.S. Kabupaten (9 or 15) -- inpatient and outpatient data  
Puskesmas (18 or 30) -- outpatient data

Relevant Resources Materials -- The ADSP study will collect available secondary data for use in the design, implementation, and/or analysis of prescribing data. Sources to consider include:

- LitBanKes studies
- Ford Foundation supported work in provinces
- Aceh studies on prescription purchase by patients, etc.
- CSP-II studies
- Indonesian consumer group studies of private pharmacy prescriptions
- The "red book."

Special Criteria for Selection of Implementor -- In addition to the general criteria set out for all potential implementors (see Section 4.2.), the following criteria are suggested for the DUS:

Organizational experience

- Demonstrated ability of the bidder to plan, implement, and supervise multi-location clinical data collection efforts in public health facilities in Indonesia.
- Demonstrated ability of the bidder to recruit and train survey team members with the capability to accurately collect and code diagnosis and prescription information.
- Demonstrated ability of the bidder to analyze and present logically the results of clinical data sets of at least several thousand observations.

Proposed Study Methods

- Description of and justification for sampling methodology.
- Feasibility and comprehensiveness of data analysis plan.

3.2. Drug Management Study (DMS)

The Drug Management Study is perhaps the most challenging of the five studies, since it has the widest scope (Pusat, Province, Kab/Kot, Puskesmas, and Puskesmas Pembantu), the greatest diversity of information (interviews with decision-makers and managers, observations of storage conditions and other supply system characteristics, and detailed analysis of stock records and drug orders), and deals with potentially sensitive issues.

Study Objectives -- The objectives of the DMS are to:

(1) Assess objectively and quantitatively how effectively the current system is performing with respect to planning, procurement, and distribution. (Delivery and use are included in other studies.) Specifically, the study will measure supply system performance in terms of:

- total drug budget at the service points and the sources of the budget at Kab/Kot, Province, and Pusat levels;
- adequacy of the budget in comparison with service-based needs;
- timeliness of order processing and procurement between each level of the system and between suppliers and the Kab/Kot;
- drug availability at the service points as indicated by frequency and length of stockouts or other measures;
- quantities of drugs ordered versus drugs received at each level;
- effectiveness of quality assurance system;
- losses from damage, expiration, theft, spoilage or other causes.

(2) Determine where are the key constraints or problems which affect supply system performance.

(3) Determine why the constraints and problems exist. Specifically, are the causes related to inadequate money, manpower, materials, or management.

(4) Make recommendations regarding the potential interventions which are most likely to be cost-effective.

Methods and Locations -- At each location included in the sample, the DMS will collect information on the following factors, as relevant to the functions of the specific location:

Supply system inputs -- objective and quantitative measures of money (sources and amounts for drug budgets and expenditures) and materials (storage facilities, transport, recording and reporting materials, data processing equipment, etc.). Manpower (quantity, quality, and motivation of staff) will be considered in the MPS.

Supply system process -- subjective or qualitative assessment of the management processes (administrative structures, procedures, etc.) used to coordinate planning, procurement, and distribution.

Supply system outcome -- quantitative, objective assessment of supply system performance in areas such as (1) timeliness of order processing and procurement between each level of the system and between suppliers and the Kab/Kot; (2) drug availability at the service points as indicated by frequency and length of stockouts or other measures; (3) quantities of drugs ordered versus drugs received at each level; (4) effectiveness of quality assurance system; and (5) losses from damage, expiration, theft, spoilage or other causes.

The information on drug budgets will be gathered from all relevant sources, including INPRES, ASKES, CDD, EPI, and others. But the detailed assessment of supply system performance will look primarily at INPRES and ASKES drugs. Quantitative information on drug ordering, availability, quality assurance and other measures of performance will use a set of 24 to 40 Indicator Drugs (tracer drugs) chosen from the INPRES/ASKES A, B1, B2, and D lists.

Data collection techniques will include:

- Interviews -- all levels
- Observations (storage conditions) -- GFK, Puskesmas
- Kab/Kot annual drug order analysis -- Pusat, Prov., Kab/Kot
- Stock record ("kardex") analysis -- GFK, Puskesmas
- Monthly/quarterly order analysis -- Puskesmas

Study locations and individuals or organizations to be interviewed include the following:

Pusat -- Dep Dagri, DepKes (POM, P2MPLP, Binkesmas, ASKES)  
Provinces (6)  
Kab/Kot (9 or 15) -- GFK, R.S. Kab (C/D), Dinkes. Tk.II  
Puskesmas (18 or 30)  
Puskesmas Pembantu (probably less than 18).

Pharmaceutical suppliers (Kimiafarma, Indofarma, Phapros, and provincial suppliers of List C drugs) will not be interviewed in this phase of assessment. If the DMS indicates that suppliers may be responsible for delays, for supplying incorrect quantities, or for quality problems, then they will be interviewed in a follow-up special study.

Relevant Resources Materials -- The ADSP study will collect available secondary data for use in the design, implementation, and/or analysis of the drug management study. Sources to consider include:

- The "green book" and the "blue book"
- Panduan Pengawasan Obat Inpres, Tahun 1987/1988 (Guidelines for Supervision of INPRES Drugs)
- Supply Management Component, CSP-II, Survey Instruments and Preliminary Findings.

Special Criteria for Selection of Implementor -- In addition to the general criteria set out for all potential implementors (see Section 4.2.), the following criteria are suggested for choosing the implementor of the DMS:

Organizational Experience

- Familiarity with Puskesmas and R.S. Kabupaten pharmaceutical supply systems.
- Demonstrated ability to organize audits of multi-level, multi-province management service systems.
- Depth of pharmaceutical supply knowledge and experience as reflected in the bidder's description of potential interventions which might be recommended for testing on the basis of the DMS results.

### Proposed Study Methods

- Practicality, relevance, and conceptualization of quantitative Performance Indicators proposed for the assessment of supply system outcome.
- Study design capacity and understanding of public sector supply system organization as reflected in the draft survey instrument and bidder's proposed method for selecting the 24-40 Indicator Drugs.

### 3.3. Social Marketing Study (SMS)

The SMS is a marketing and medical sociological study whose potential audiences include the four groups identified in the drug use process: the community (users and non-users of health services), the provider (government health facility doctors, nurses, and other health workers who diagnose and prescribe), the dispenser, and the patient.

In part the study is meant to determine how best to change patterns of drug mis-use identified by anecdotal experience and previous studies (and further defined by the DUS). In addition, though, the SMS will interview and observe patients/consumers to identify significant types of drug mis-use attributable to patient behavior.

Study Objectives -- The specific objectives of the study are to:

- (1) Determine how patients use and mis-use drugs (eg., level of compliance, amount of sharing of prescriptions).
- (2) Determine the key factors which influence consumers and health personnel in the use and mis-use of drugs. "Consumers" include both the users and non-users of Puskesmas and R.S. Kab services. "Health personnel" refer to prescribers (doctors, nurses, paramedics, etc.) and dispensers (pharmacists, assistant pharmacists, etc.).
- (3) Collect information needed to identify interventions which should be tested in specific areas.
- (4) Suggest the intervention strategies which are most likely to be cost-effective in promoting rational use of drugs. For example, communication and education efforts; management interventions related to pricing, packaging, etc.; or regulatory interventions such as a 3-drug rule.
- (5) Make specific recommendations for communications development, including target groups, messages, channel, and so forth.
- (6) Suggest a monitoring strategy for social marketing efforts. Quantitative baseline data do not necessarily need to be collected by the SMS, unless they help to achieve any of the preceding objectives.

Methods and Locations -- It is expected that the study will rely on a combination of interview and observational data. As part of their proposed methodology, bidders should indicate the type or types of interviews (in-depth individual interviews, survey-type interviews, focus group interviews, and so forth) they would plan to use.

Currently, it is also proposed that the SMS conduct a patient compliance and follow-up study to determine whether patients correctly took the medications they received, whether they filled outside prescriptions given them at government facilities, and whether they received and understood information from the provider or dispenser about the drugs they were given.

The sample locations and data collection method are as follows:

**R.S. Kab/Kot.**

Prescriber interviews -- sample of prescribers

Dispenser interviews

Outpatient brief interview with follow-up home visits to a sample of patients with diarrheal disease or acute respiratory disease

**Puskesmas**

Prescriber interviews -- all providers

Dispenser interviews

Outpatient brief interview with follow-up home visits to a sample of patients with diarrheal disease or acute respiratory disease

**Community**

Interviews in communities in which study R.S. Kab/Kot and Puskesmas are located.

Relevant Resources Materials -- The ADSP study will collect available secondary data for use in the design, implementation, and/or analysis of prescribing data. Sources to consider include:

- LitBanKes studies
- CDD communications and social marketing work in West Java.

Special Criteria for Selection of Implementor -- In addition to the general criteria set out for all potential implementors (see Section 4.2.), the following criteria are suggested for selecting the SMS implementor:

Organizational Experience

- Experience with qualitative market research into factors which influence provider prescription of pharmaceutical products and consumer use of prescription and non-prescription pharmaceutical products.
- Experience with qualitative research into patient compliance with pharmaceutical treatment.
- Experience with development of communications and other marketing activities related to pharmaceutical products.

Proposed Study Methods

- Completeness, relevance, and explanation of data collection plan, including selection of respondents, interview plan, etc.
- Understanding of rational drug use concepts as reflected in the data collection plan and draft data collection instruments for assessing drug use and mis-use among providers and consumers.

### 3.4. Manpower Study (MPS)

The Manpower Study is concerned with the availability of staff, quantity of work (workload, staff requirements), and quality of work in the area of drug management and, to a lesser extent, drug use.

Study Objectives -- The objectives of the MPS are to:

- (1) Collect data on drug management manpower availability, qualifications, competence, turnover, and performance at each level of administration, with particular emphasis on provincial, Kabupaten (GFK, R.S.), and Puskesmas staff.
- (2) Collect data on workload and skill requirements at each level of the supply system.
- (3) Using the above information, prepare recommendations on the most cost-effective staffing pattern for the whole series of drug management activities and on steps necessary to achieve that pattern.
- (4) Prepare recommendations on programs for the development and training of drug supply managers.
- (5) Suggest interventions most likely to increase the effectiveness and efficiency of available manpower; interventions to consider include development or revision of manuals and standard procedures, changes in formal (pre-service) education, training programs (e.g., "crash" programs for GFK managers or storekeepers).
- (6) Assess how much and from what sources providers have learned about (a) drug management, (b) rational drug use, and (c) essential drug concepts in Indonesia.

Methods and Locations -- Information will be collected from official documents (personnel policies, regulations and procedures, job descriptions, etc.), from existing staffing records at each level (but not individual personnel records), and from interviews with staff at each level.

At the central level, information will be sought from Biro Kepegawaian, Biro Perencanaan, and Pusat Data Kesehatan. The provincial, Kabupaten, and Puskesmas levels information will be collected at generally the same locations as for the DMS.

The MPS should begin by looking carefully at work which has already been done with respect to pharmacist manpower needs, training in drug management, and so forth.

Relevant Resources Materials -- The ADSP study will collect available secondary data for use in the design, implementation, and/or analysis of the MPS.

Sources to consider include:

- o ISN and related manpower planning work already done by DepKes
- o Rencana, Pembungunan Lima Tahun Ketima Bidang Kesehatan (1989/90 - 1993/94), August 1988.

Special Criteria for Selection of Implementor -- In addition to the general criteria set out for all potential implementors (see Section 4.2.), the following criteria are suggested for choosing the MPS implementor:

Organization Experience

- Previous experience in assessment of manpower requirements in large, multi-level service systems -- preferably both private sector and public sector systems.
- Familiarity with the Government of Indonesia educational and personnel systems, particularly with respect to introducing change in the systems; experience in introducing change in public or private institutions aimed at improving staff efficiency and effectiveness.

Proposed Study Methods

- Proposed methodology for determining staff requirements for each level of the drug management system.
- Organization, completeness, relevance, and explanation of data collection plan and data collection instrument(s).

3.5. Secondary Data and Bibliography Study (ADSP)

Study Objectives -- The objectives of the ADSP are to:

- (1) Collect and review relevant documents (published studies, government reports, reports from donor and international agencies, books, etc.) and secondary data needed to design and implement the four field assessments (DUS, DMS, SMS, and MPS).
- (2) Establish a library of project-generated data and reports.
- (3) Provide data and literature needed for integrated evaluation and review of the four field studies.
- (4) Provide data and information for designing and testing of interventions.
- (5) Provide information support for project management in implementing the HSPF Pharmaceutical Component.

Outputs -- The outputs of the ADSP will include the following:

- (1) Document library
- (2) Secondary data index (list of relevant secondary data available for analysis by PIO/P staff and consultants)
- (3) Electronic data processing (EDP) library for project-generated data
- (4) System for indexing and retrieval of information
- (5) Lists of available documents and data relevant to each of the Focused Assessments.

Technical Assistance Needs -- It is anticipated that, in addition to PIO/P staff and long-term consultants, the ADSP will require a modest amount of domestic short-term consultation.

## 4. TECHNICAL REVIEW AND AWARD OF FOCUSSED ASSESSMENT CONTRACTS

### 4.1. Technical Reviewers

The Pharmaceutical Component is establishing a Steering Committee to provide the director with technical guidance. Proposed membership includes Ditjen POM, Yanmedic, Binkesmas, SetJen, and Badan Litbangkes. It is suggested that this Committee participate in the final review of short-listed (eg, top two or three) bidders.

In addition, it is suggested that consultants with special expertise in individual areas be engaged for a period of one to two weeks to assist in the review process. Proposed consultants include:

DUS -- Ms. Mireille G.L.M. Visser

DMS -- Mr. Sutikno Budiardjo

SMS -- A resident consultant in communications or social marketing (expatriate or domestic) or an external consultant if in the country for another component of the project

MPS -- A resident consultant in manpower development (expatriate or domestic), local USAID consultant with general management or manpower planning experience, or an external consultant if in the country for another component of the project.

Consultants who themselves bid on a study or are directly affiliated with an organization which bids on a study, should not, of course, participate in the evaluations of any proposals.

### 4.2. General Criteria Applicable to All Studies

Prior to the formal Call for Offers, Technical Criteria for bid evaluation should be decided upon. These criteria should be made available to the potential bidders.

Minimal qualifications should be specified, eg.:

- registered in Indonesia as a research or consulting firm for a minimum of four years;
- fulltime employees at the executive level with expertise and experience relevant to the specific study who will oversee the study.

In addition, bids might be scored using a point system. For example:

#### Organizational Experience (35 points)

- \* Relevant past study experience -- The bidder should provide a list of related studies which have been completed in the past, including the name of the study, the client organization, the name of an individual who can be contacted, address, and phone number.
- \* Relevant support capacity, including in-house data processing capability.

- \* Knowledge and experience in the specific area of study as reflected in bidder's description of interventions which might be recommended on the basis of study findings.

Proposed Study Methods ( 35 points)

- \* data collection instruments
- \* data collection plan
- \* supervision and quality control plan for data collection
- \* analysis plan which indicates the types of information which will be presented in the final report.

Experience of Proposed Staff (20 points)

- \* formal training, experience, and record of performance for the proposed study principle investigator and the study manager
- \* survey enumerators -- experience skill -- ability to recruit and train.

Quality of Proposal (10 points)

- \* presentation and style
- \* clarity
- \* organization

With a scoring system, each bidder who meets the minimal qualifications would be scored in each of the four areas by each member of the review panel. The bidder with the highest average score for all four areas would be considered the most technically qualified.

4.3. Specific Criteria for Individual Studies

The descriptions of the individual Focussed Assessments in Section 3 include for each study a list of special criteria for Selection of Implementor. This section lists a few specific criteria for rating individual proposals on Organizational Experience and Proposed Study Methods. These criteria should be considered when awarding points under these two headings.

## 5. OTHER PHARMACEUTICAL COMPONENT TOPICS

### 5.1. Recruitment of Domestic Long-Term Consultants

The Pharmaceutical Component has been developing without long-term domestic or international advisors, but recruitment is in process. Given the nature of the component and the balance of skills already available to the component, it is suggested that a vigorous effort be made to recruit a publicly-minded domestic long-term consultant with considerable marketing experience in the Indonesian pharmaceutical industry. Individuals with such qualifications have proven invaluable to other public sector efforts to promote rational drug use.

### 5.2. PIO/P Study Visit

The workplan for the assessment phase of the pharmaceuticals component includes a study visit for the Director of the PIO/P for the purposes of identifying and interviewing potential expatriate consultants, gathering specific information relevant to the project, and identifying appropriate sites for future comparative studies.

The current proposed itinerary includes visits to ISTI, MSH, Arthur D. Little, Harvard, the Iowa Drug Information Service, Professor Wertheimer, and others. Other relevant individuals or organizations which might be visited include:

#### Washington, DC

U. S. Pharmacopoeia -- Dr. Keith Johnson, Drug Information  
Pan American Health Organization -- Dr. Enrique Fefer

#### Boston, MA

Program for Analysis of Clinical Strategies, Harvard -- Dr. J. Avorn, et al.

Asian Institute, Harvard -- affiliated with A.I.M.

New England Medical Center -- Dr. W. Gouveia, Hospital Pharmacy

#### Geneva, Switzerland

WHO Action Programme on Essential Drugs -- Dr. Ernst Lauridsen, Dr. Godfrey Walker, Dr. Hans Hogerzeil, Ms. Margaretha Helling-Borda (meeting these individuals and visiting Essential Drug Document Center is a must at some point during the project).

#### Possible Conferences

Essential Drugs in Latin America, WHO/PAHO, Mexico City, October 10-14.

American Public Health Association, Boston, November 13-17 (Director, PIO/P could assist in scheduled presentation of Indonesia data).

IFPMA, Washington, DC, October 4-6 at which new Director-General of WHO is reportedly scheduled to present a new WHO view on essential drugs.

### 5.3. SWEDIS Software

It has been proposed that the project support the purchase of SWEDIS software, a multi-function pharmaceutical management software package developed under the National Board of Health and Welfare, Sweden. SWEDIS contacts informed MSH that the cost for installation begins at \$10,000, that file conversions are possible (to allow interaction with other data and software), and that the capability exists to generate reports in Bahasa. A trial use of SWEDIS under the project would probably be warranted, but its intended use in the Indonesian context and special installation requirements should be developed in advance of making specific procurement arrangements.

## **ANNEXES**

### **A. Terms of Reference -- Planning and Implementing Focussed Assessments**

**DHS (Drug Management Study) Planning**  
**DUS (Drug Use Study) Planning**  
**SMS (Social Marketing Study) Planning**

### **B. Possible Constraints and Potential Interventions**

**B.1. Drug Management**  
**B.2. Drug Use**

Health Sector Financing Project  
PHARMACEUTICAL COMPONENT

Terms of Reference

TITLE OF CONSULTANCY: DRUG USE STUDY (DUS) PLANNING

PROPOSED DATES: 21 or 28 November to 17 or 21 December, 1988 (4 weeks)

PROPOSED CANDIDATES: Quick, Ross-Degnan

SUMMARY OF ASSIGNMENT:

Assist PIO/P, Activity Coordinators, and Study Implementor in the design, pre-testing, and revision of data collection plan and instrument for the Drug Use Study.

SPECIFIC ACTIVITIES: To follow.

QUALIFICATIONS: To follow.

Health Sector Financing Project  
PHARMACEUTICAL COMPONENT

Terms of Reference

TITLE OF CONSULTANCY: DRUG MANAGEMENT STUDY (DMS) PLANNING

PROPOSED DATES: 21 or 28 November to 17 or 21 December, 1988 (4 weeks)

PROPOSED CANDIDATES: Sutikno Budiardjo, Dr. C. Olson, Mr. J. Bates, or Mr. V. Dias

SUMMARY OF ASSIGNMENT:

Assist PIO/P, Activity Coordinators, and Study Implementor in the design, pre-testing, and revision of data collection plan and instrument for the Drug Management Study.

SPECIFIC ACTIVITIES: To follow.

QUALIFICATIONS: To follow.

16

Health Sector Financing Project  
PHARMACEUTICAL COMPONENT

Terms of Reference

TITLE OF CONSULTANCY: SOCIAL MARKETING STUDY (SMS) PLANNING

PROPOSED DATES: 21 or 28 November to 17 or 21 December, 1988 (4 weeks)

PROPOSED CANDIDATES: Per ISTI arrangements with Manoff International

SUMMARY OF ASSIGNMENT:

Assist PIO/P, Activity Coordinators, and Study Implementor in the design, pre-testing, and revision of data collection plan and instrument for the Social Marketing Study. In addition, the consultant will assist the PIO/P and Activity Coordinators to further develop their understanding of the role of social marketing in this project.

SPECIFIC ACTIVITIES: To follow.

QUALIFICATIONS: To follow.

21

ANNEX B.1.

DRUG MANAGEMENT PROCESS

Possible Constraints and Potential Interventions

LEVEL Principle Functions	POSSIBLE CONSTRAINTS (Partial Listing)	POTENTIAL INTERVENTIONS (Partial Listing)
PUSAT  Planning Procurement	<ul style="list-style-type: none"> <li>● delays in Daftar A, B1, B2 procurement</li> <li>● insufficient budget</li> <li>● mis-allocation of budget</li> <li>● lack of budget or procurement coordination</li> </ul>	<ul style="list-style-type: none"> <li>● closer procurement monitoring</li> <li>● higher allocation (based on data collected by project)</li> <li>● drug procurement review process (eg., DEM)</li> <li>● improved budget allocations</li> <li>● improved coordination among Pusat units funding or procuring drugs</li> </ul>
PROVINCE  Planning Procurement	<ul style="list-style-type: none"> <li>● delays in Daftar C procurement</li> <li>● insufficient budget</li> <li>● mis-allocation of budget</li> <li>● lack of budget or procurement coordination</li> <li>● inefficient Daftar C procurement</li> </ul>	<ul style="list-style-type: none"> <li>● closer procurement monitoring</li> <li>● higher allocation (based on data collected by project)</li> <li>● drug procurement review process (eg., DEM)</li> <li>● improved budget allocations</li> <li>● improved coordination</li> </ul>
KABUPATEN (GFK)  Planning Distribution	<p>INSUFFICIENT SUPPLY, CAUSED BY:</p> <ul style="list-style-type: none"> <li>● delays in delivery annual drug order</li> <li>● insufficient budget</li> <li>● wrong quantities ordered</li> <li>● drugs deteriorate in GFK</li> <li>● other drug losses in GFK (expiration, theft, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>● closer procurement monitoring</li> <li>● higher Kab/Kot allocation (based on data collected by project)</li> <li>● drug procurement review process (eg., DEM)</li> <li>● improved inventory records</li> <li>● improved storage conditions</li> <li>● improved security</li> </ul>

ANNEX B.1.

DRUG MANAGEMENT PROCESS

Possible Constraints and Potential Interventions

LEVEL Principle Functions	POSSIBLE CONSTRAINTS (Partial Listing)	POTENTIAL INTERVENTIONS (Partial Listing)
PUSKESMAS  (Planning) Distribution Delivery * Use *	INSUFFICIENT SUPPLY, CAUSED BY:  ● delay in delivery/collection from GFK  ● wrong quantities ordered (too much, too little)  ● drugs deteriorate at Puskesmas  ● other drug losses at Puskesmas (expiration, theft, etc.)  ● sub-optimal prescribing & dispensing	  ● improved transport management  ● improved inventory records  ● improved methods of determining order quantities  ● improved storage conditions  ● improved security  ● improved prescribing & dispensing (see Drug Use)
PUSKESMAS PENBANTU  Delivery ** Use **	INSUFFICIENT SUPPLY, CAUSED BY:  ● delay in delivery/collection from Puskesmas  ● wrong quantities ordered (too much, too little)  ● drugs deteriorate at facility  ● other drug losses at Pusk.Pem. (expiration, theft, etc.)  ● sub-optimal prescribing & dispensing	  ● improved transport management  ● improved inventory records  ● improved methods of determining order quantities  ● improved storage conditions  ● improved security  ● improved prescribing & dispensing (see Drug Use)

ANNEX B.2.  
 DRUG USE IMPROVEMENT  
 POSSIBLE CONSTRAINTS AND POTENTIAL INTERVENTIONS

ACTOR Role	POTENTIAL CONSTRAINTS/PROBLEMS (Partial Listing)	POTENTIAL INTERVENTIONS (Partial Listing)
COMMUNITY	<ul style="list-style-type: none"> <li>● treatment without diagnosis (self medication; non-use of health facilities)</li> <li>● reinforce individual patient misuse of drugs</li> </ul>	<p>EDUCATIONAL</p> <ul style="list-style-type: none"> <li>● community meetings</li> <li>● radio campaigns</li> <li>● posters</li> <li>● face-to-face</li> <li>● magazines, newspapers</li> <li>● television</li> <li>● puppet shows</li> <li>● opinion leader influence</li> </ul> <p>MANAGERIAL</p> <ul style="list-style-type: none"> <li>● attractive packaging</li> <li>● adjust price level</li> <li>● differential pricing of drugs</li> </ul>
PRESCRIBER	<ul style="list-style-type: none"> <li>● overprescribing (eg., 4 drugs simple diarrhea)</li> <li>● extravagant prescribing (eg., Xylomidon inj)</li> <li>● incorrect prescribing (eg., antibiotics for simple diarrhea)</li> <li>● under-dosing (eg., 2 1/2 days of antibiotics; 3-day rule)</li> <li>● injections for everything!</li> </ul>	<p>EDUCATIONAL (provide information)</p> <ul style="list-style-type: none"> <li>● formal (pre-service) education</li> <li>● training (continuing education)</li> <li>● workshops</li> <li>● roundtable conferences</li> <li>● face-to-face</li> <li>● print materials, eg. newsletter</li> </ul> <p>MANAGERIAL (structure decisions)</p> <ul style="list-style-type: none"> <li>● audits plus feedback</li> <li>● standard treatments</li> <li>● procurement analysis &amp; feedback</li> <li>● structured order forms</li> <li>● goodies &amp; gimmicks</li> </ul> <p>REGULATORY (restrict decisions)</p> <ul style="list-style-type: none"> <li>● de-list extravagant drugs</li> <li>● repeal 3-day rule</li> <li>● 3-drug rule</li> <li>● prescribing restrictions</li> <li>● distribution restrictions</li> </ul>

ANNEX B.2.  
 DRUG USE IMPROVEMENT  
 POSSIBLE CONSTRAINTS AND POTENTIAL INTERVENTIONS

ACTOR Role	POTENTIAL CONSTRAINTS/PROBLEMS (Partial Listing)	POTENTIAL INTERVENTIONS (Partial Listing)
DISPENSER	<ul style="list-style-type: none"> <li>● drugs not properly labeled</li> <li>● drugs not properly packaged</li> <li>● patients not given proper verbal instructions</li> </ul>	EDUCATIONAL (provide information) <ul style="list-style-type: none"> <li>● formal (pre-service) education</li> <li>● training (continuing education)</li> <li>● workshops</li> <li>● print materials, eg. newsletter</li> </ul> MANAGERIAL (structure decisions) <ul style="list-style-type: none"> <li>● improved labeling materials</li> <li>● improved packaging materials</li> </ul> REGULATORY (restrict decisions) <ul style="list-style-type: none"> <li>● dispensing restrictions</li> </ul>
PATIENT/ CONSUMER	<ul style="list-style-type: none"> <li>● patients take incomplete courses of medicine</li> <li>● patients take wrong medicines</li> <li>● patients share medicines with others</li> <li>● failure to return for follow-up care</li> </ul>	EDUCATIONAL Same as community, plus: <ul style="list-style-type: none"> <li>● prescriber advice, counseling</li> <li>● dispenser advice, counseling</li> <li>● patient educator counseling</li> <li>● wall posters</li> <li>● leaflets</li> </ul> MANAGERIAL <ul style="list-style-type: none"> <li>● differential pricing by drug</li> </ul> REGULATORY <ul style="list-style-type: none"> <li>● remove non-essential drugs from DOEM</li> </ul>