LFS add-on module on functional difficulties and barriers to employment
Variable derivation guide (v1)
for PAPI and CAPI

July 2020

Contents

INTRODUCTION

This guide describes how to use the ILO add-on module on Functional difficulties and barriers to employment (v1) to compute the main derived variables on the topic.
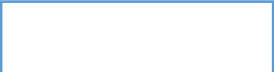
Detailed information for each derived variable is provided following a step-by-step approach covering:

A. **Basic international definition** as per the latest ICLS standards
B. **Measurement strategy and question mapping** of all relevant survey questions and modules
C. **Flow charts** showing the relevant question sequences and reference syntax

Following the modular approach of the ILO LFS model questionnaire, the guide makes reference to variables captured in the add-on module as well as in the core modules of the parent labour force survey. No specific guidance is provided on the treatment of missing values or DON'T KNOW answers in the relevant variables. Users will need to adapt the reference syntax to take account of national differences in the survey content and to handle missing values or DON'T KNOW answers.

FLOW CHARTS KEY

The diagram below shows the different symbols used in the flow charts and their intended meaning. Users should refer to this key when interpreting the flow charts used in this guide.

	Initial condition(s)
	Variable / model question
	Value of the variable
	Decision point for optional modules or previous status / classification
	Module
	Target derived variable
	Previously derived variable
	Other ending status / classification

FUNCTIONAL DIFFICULTIES (DIF)

Based on the World Health Organization's International Classification of Functioning, Disability, and Health which provides conceptual basis, the Washington group on disability statistics defines disability, as the outcome of the interaction between a person's functional limitation (difficulties doing basic activities) and an unaccommodating environment that results in the inability to fully participate in society. The focus of this definition is on functioning in basic actions in contrast to approaches that are based on a medical model which focus on impairments or bodily functions.

In order to operationalise this approach, the group has developed question sets.

The Washington Group Short Set of Questions cover six functional domains or basic actions: seeing, hearing, walking, cognition, self care, and communication. Each question has four response categories: (1) No, no difficulty, (2) Yes, some difficulty, (3) Yes, a lot of difficulty and (4) Cannot do it at all. The severity scale is used in the response categories in order to capture the full spectrum of functioning from mild to severe.

The six domains cover many but not all areas of functioning. Therefore, the group has developed additional question sets[1].

The LFS module on functional difficulties (DIF) allows for identification of persons with disabilities based on the six functional domains (the Washington Group Short Set of Questions) but also two additional domain (anxiety and depression).

Depending on whether six domain or eight domains are covered, the sub-population of persons with disabilities include:
- those that experience a lot of difficulties or cannot do at all at least one of six core functional domains (seeing, hearing, walking, cognition, self-care and communication) or
- those that experience a lot of difficulties or cannot do at all at least one of six core functional domains (seeing, hearing, walking, cognition, self-care and communication or experience anxiety or depression on daily basis.

Source: Recommendations and guidelines of the Washington Group on Disability Statistics are available at: http://www.washingtongroup-disability.com/publications/implementing/

Additional resources: Convention on the Rights of Persons with Disabilities (CRPD)
https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html
The International Classification of Functioning, Disability and Health
https://www.who.int/classifications/icf/en/

Measurement strategy The module on functional difficulties (DIF) capture the severity of the difficulty experienced. Multiple disability scenarios can be described depending on the domain(s) of interest and the choice of severity cut-off. For purposes of reporting and generating internationally comparable data, it is recommended to define the population of persons with disabilities as those reporting "a lot of difficulty" or "cannot do it at all" in at least one of six core functional domains (seeing, hearing, walking,

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[1]For question sets see http://www.washingtongroup-disability.com/washington-group-question-sets/

cognition, self-care and communication) or alternatively, the former and those reporting feeling very anxious or depressed on "daily" basis".

Relevant modules	• LFS module on Demographic and background characteristics (Module (DIF))
Relevant questions	DIF_1-DIF-6, DIF_7, DIF_8

C.   Flow chart and reference syntax

Persons with disabilities (6 domains)
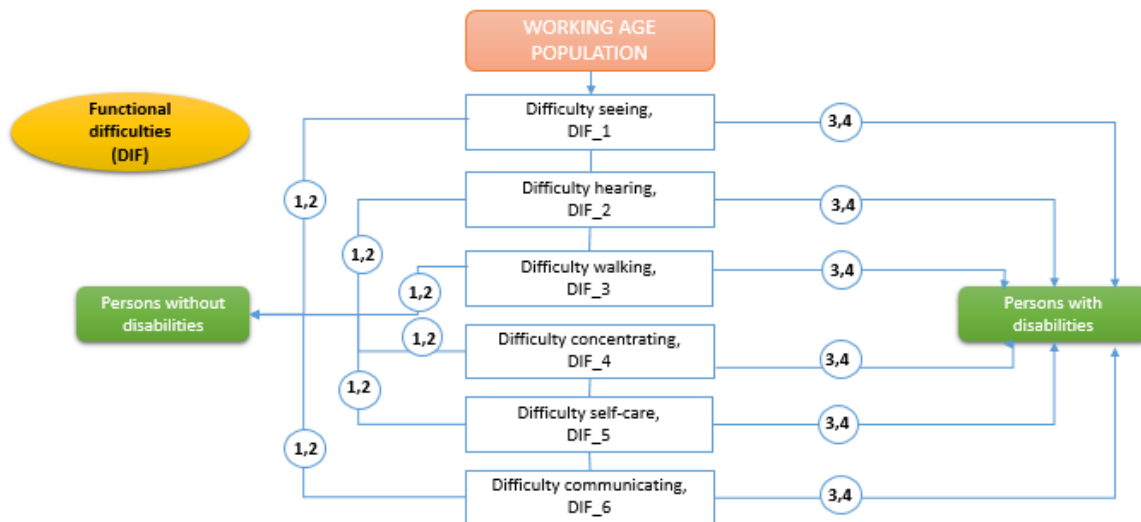
Reference Syntax	Disability status

IF (DIF_1=3,4 *OR*
    DIF_2=3,4 *OR*
    DIF_3=3,4 *OR*
    DIF_4=3,4 *OR*
    DIF_5=3,4 *OR*
    DIF_6=3,4
	Persons with disabilities

IF (DIF_1=1,2 *AND*
    DIF_2=1,2 *AND*
    DIF_3=1,2 *AND*
    DIF_4=1,2 *AND*
    DIF_5=1,2 *AND*
    DIF_6=1,2
	Persons without disabilities

Persons with disabilities (6 + 2 domains)
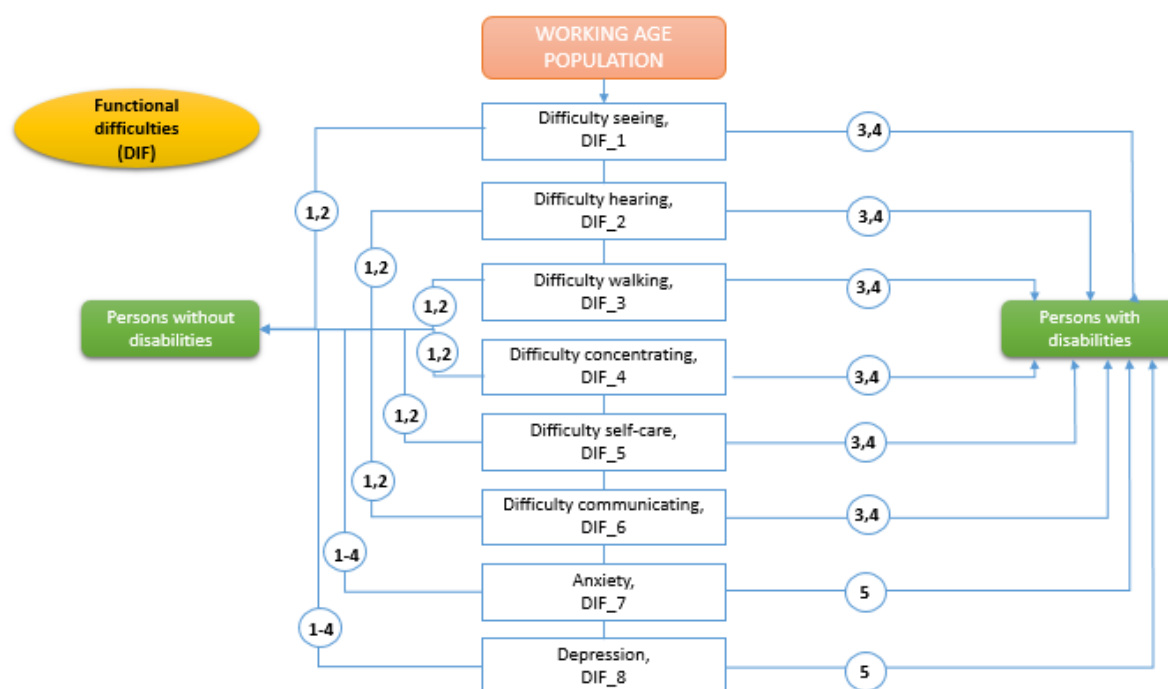
Reference Syntax	Disability status

IF (DIF_1=3,4 *OR*
     DIF_2=3,4 *OR*
     DIF_3=3,4 *OR*
     DIF_4=3,4 *OR*
     DIF_5=3,4 *OR*
     DIF_6=3,4 *OR*
     DIF_7=5 *OR*
     DIF_8=5)
	Persons with disabilities

IF (DIF_1=1,2 *AND*
     DIF_2=1,2 *AND*
     DIF_3=1,2 *AND*
     DIF_4=1,2 *AND*
     DIF_5=1,2 *AND*
     DIF_6=1,2 *AND*
     DIF_7=1-4 *AND*
     DIF_8=1-4)
	Persons without disabilities

BARRIERS (EBR)

A. International definition

There is no internationally agreed standard on this.

B. Measurement strategy and question mapping

|	
Measurement strategy	Questions EBR_1 and EBR_2 identify factors that may hinder or facilitate the participation in the labour market of PWD not in employment.
Relevant modules	• LFS Demographic and background characteristics (Module (DIF)) • LFS Labour module • Module on functional difficulties and barriers to employment: Section (EBR): Barriers.
Relevant questions	EBR_1, EBR_2

C. Flow chart and reference syntax

Environmental barriers
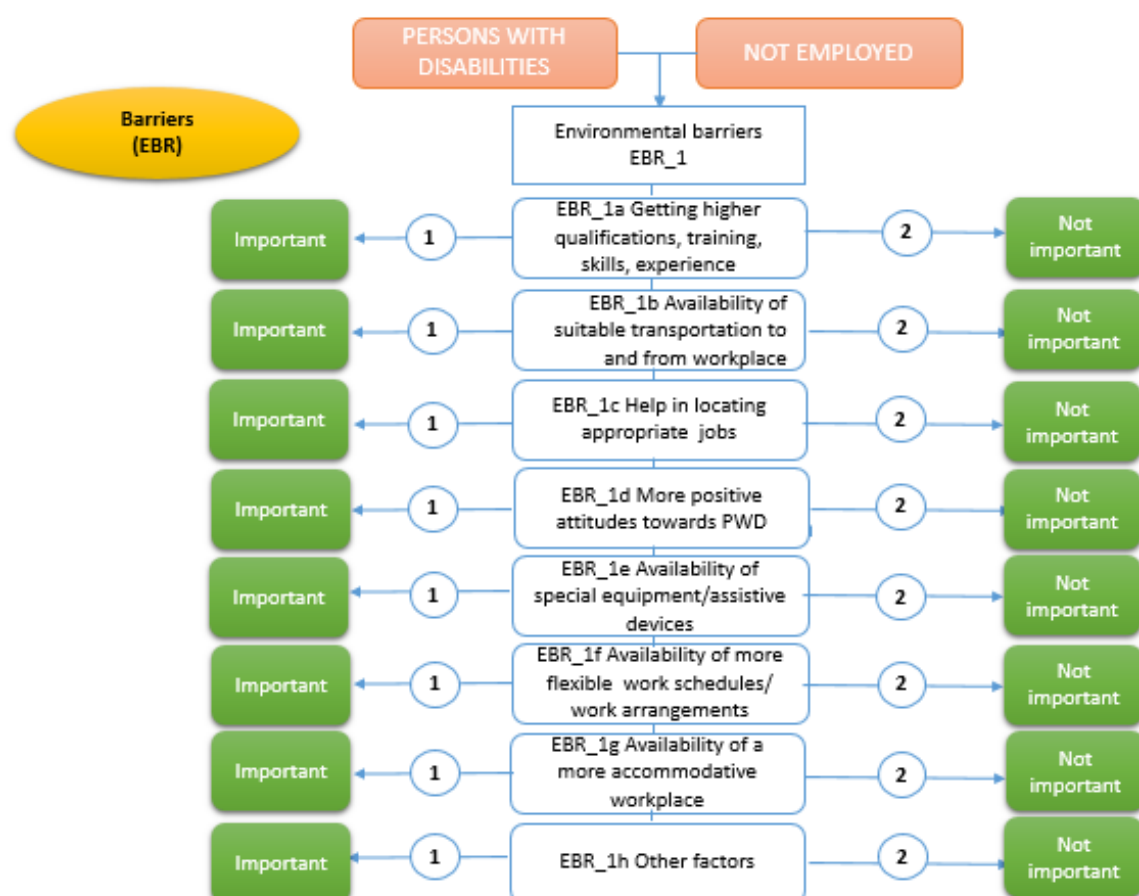
Reference Syntax	Barriers
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1a=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1a=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1b=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1b=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1c=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1c=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1d=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1d=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1e=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1e=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1f=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1f=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1g=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1f=2)	Not important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1h=1)	Important
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_1h=2)	Not important

Family supportive
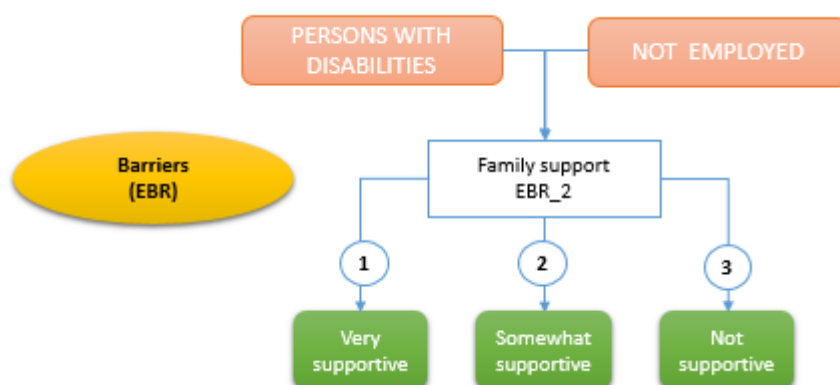
Reference Syntax	Family support
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLYED *AND* EBR_2=1)	Family very supportive
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_2=2)	Family somewhat supportive
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* NOT EMPLOYED *AND* EBR_2=3)	Family not supportive

WORKPLACE ACCOMODATION (WPA)

There is no internationally agreed standard on this.

B. Measurement strategy and question mapping

|	
Measurement strategy	Questions WPA_1 and WPA_2 identify the extent to which special working arrangements and workplace adaptations are made in order to accommodate the needs of persons with disabilities.
Relevant modules	• LFS Demographic and background characteristics (Module (DIF)) • LFS labour module • Module on functional difficulties and barriers to employment: Section (WPA): Workplace accommodation.
Relevant questions	WPA_1, WPA_2

C. Flow chart and reference syntax

Work schedule and/or work tasks arrangements
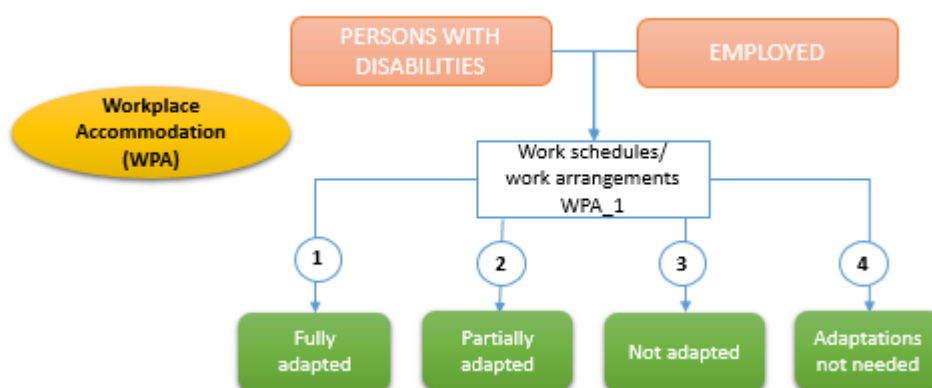
Reference Syntax	Work schedule/work tasks adaptations
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_1=1)	Fully adapted
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_1=2)	Partially adapted
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_1=3)	Not adapted
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_1=4)	Adaptations not needed

Workplace adaptations
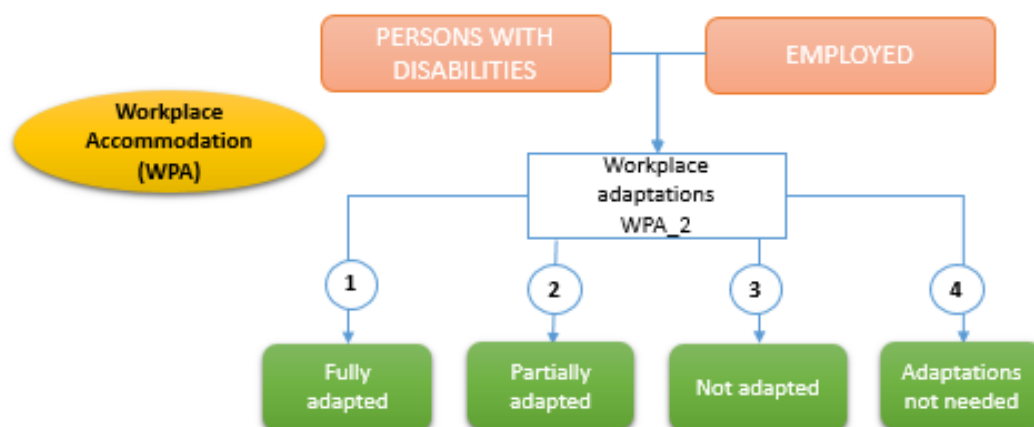
Reference Syntax	Workplace adaptations
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_2=1)	Fully adapted
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_2=2)	Partially adapted
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_2=3)	Not adapted
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* EMPLOYED *AND* WPA_2=4)	Adaptations not needed

ATTITUDES (ATT)

A. International definition

There is no internationally agreed standard on this.

B. Measurement strategy and question mapping

|	
Measurement strategy	Questions ATT_1 and ATT_2 separately identify attitudes from employers and workers towards persons with disabilities, that may hinder their participation in labour market.
Relevant modules	• LFS Demographic and background characteristics (Module (DIF)) • Module on functional difficulties and barriers to employment: Section (ATT): Attitudes.
Relevant questions	ATT_1, ATT_2

C. Flow chart and reference syntax

Employers' and workers' attitudes
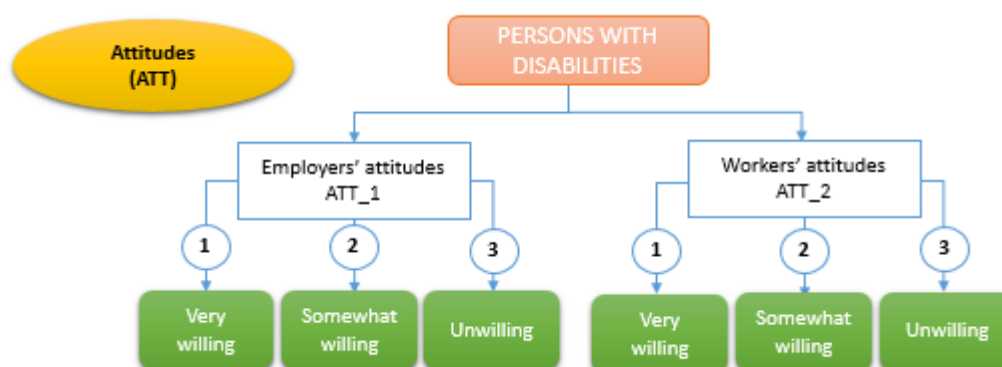
Reference Syntax	Degree of willingness
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* ATT_1=1)	Employers very willing to hire PWD
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* ATT_1=2)	Employers somewhat willing to hire PWD
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* ATT_1=3)	Employers unwilling to hire PWD
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* ATT_2=1)	Workers very willing to work alongside PWD
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* ATT_2=2)	Workers somewhat willing to work alongside PWD
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* ATT_2=3)	Workers unwilling to work alongside PWD

SOCIAL PROTECTION (SPR)

Disability certified

A. International definition

There is no internationally agreed standard on this.

B. Measurement strategy and question mapping

|	
Measurement strategy	Question SPR_1 identifies persons whose functional difficulties <mark>were officially recognised (certified) as disabilities.</mark>
Relevant modules	• LFS Demographic and background characteristics (Module (DIF)) • Module on functional difficulties and barriers to employment: Section (SPR): Social protection.
Relevant questions	SPR_1

C. Flow chart and reference syntax

Disability certified
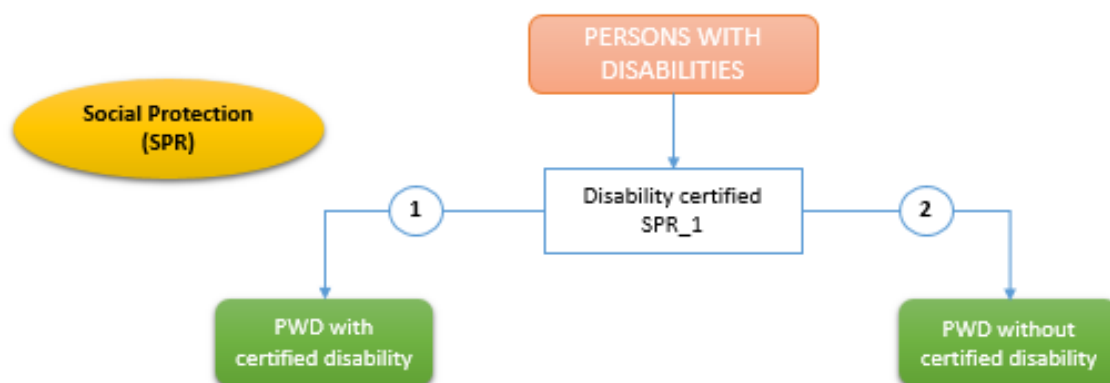
Reference Syntax	Certification
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* SPR_1=1)	PWD with certified disability
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* SPR_1=2)	PWD with certified disability

Cash and in-kind benefits

A. International definition

There is no internationally agreed standard on this.

B. Measurement strategy and question mapping

|	
Measurement strategy	Questions SPR_2 and SPR_3, separately identify persons with disabilities that receive from the government cash and/or in-kind benefits linked to their disability.
Relevant modules	• Module on functional difficulties and barriers to employment: Section (DIF): Functional difficulties, Section (SPR): Social protection.
Relevant questions	SPR_1 - SPR_3

Cash and/or in-kind benefits
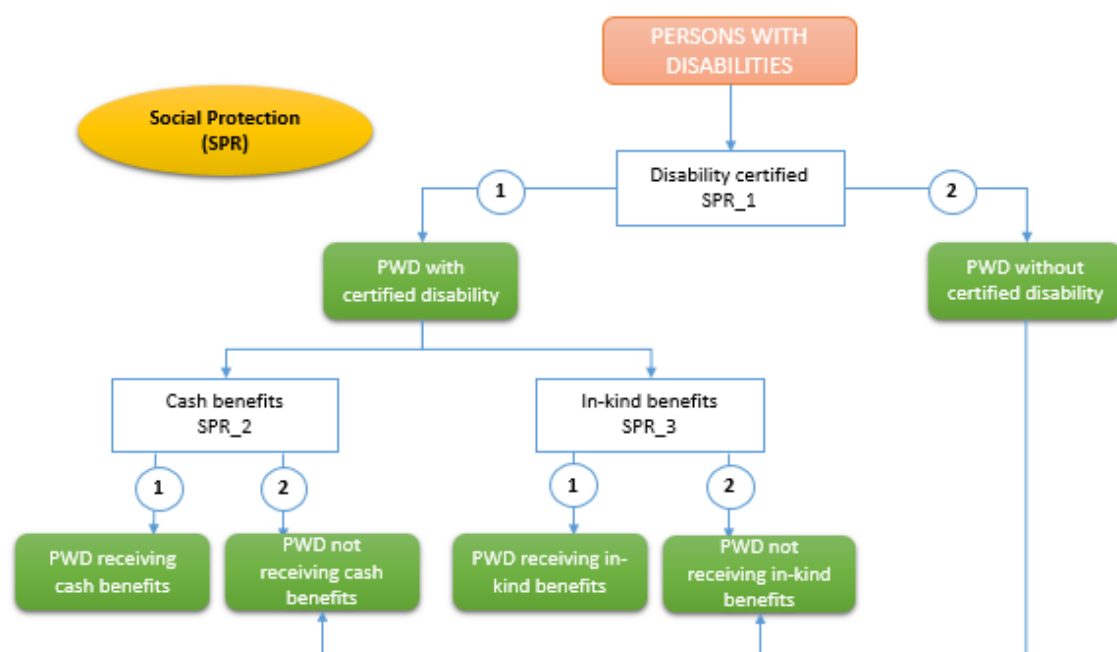
Reference Syntax	Benefits
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* (SPR_1=1 *AND* SPR_2=1))	PWD receiving cash benefits
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* (SPR_1=1 *AND* SPR_2=2) *OR* (SPR_1=2))	PWD not receiving cash benefits
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* (SPR_1=1 *AND* SPR_3=1))	PWD receiving in-kind benefits
IF (CLASSIFIED AS PERSON WITH DISABILITY *AND* (SPR_1=1 *AND* SPR_3=2) *OR* (SPR_1=2))	PWD not receiving in-kind benefits