Social and Economic Impact Assessment of the RCA Programme

Non Destructive Testing

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## [1] TRUE

###### Report Information

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# Acronyms

|  |  |
| --- | --- |
| Name | Acronym |
|  | APFNDT |
|  | ET |
| Government Party | GP |
| International Atomic Energy Agency | IAEA |
|  | ICNDT |
|  | MRA |
|  | MT |
| Non Destructuve Testing | NDT |
|  | PT |
|  | RCVA |
|  | RT |
|  | UT |

# Executive Summary

# Introduction

## Non Destructive Testing

## Social and economic impact assessment methods

# Social and economic impacts

## Improved NDT capacity and capability

## Increased scope and scale of NDT demand and use

## Improved health and safety

## Economic value (Aaron)

# Conclusion

# Annex: Case studies

# Annex B: Survey Analysis

## Introduction

X GPs are part of the agreement, findings include analysis of data collected from X experts.

1. Add Description of how the standards and criterion were define

## Criterion 1: **Improved NDT capacity and capability**

Brief description of relevance and background of this criteria **Julian**

Table 1: Key evidence for criterion 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Evidence | Dimension | Standard | Finding | Source |
| **Infrastructure** |  |  |  |  |
| Percentage of GPs that have inspection companies owned by FOREIGN entities | Infrastructure | Adequate |  | Online survey(?) |
| Percentage of GPs with LOCAL inspection companies offering services to local industry | Infrastructure | Good |  | Online survey |
| Percentage of GPs that have training centres owned by FOREIGN entities | Infrastructure | Adequate |  | Online survey |
| Percentage of GPs with LOCAL NDT training centres offering ISO 9712 training | Infrastructure | Good |  | Online survey |
| Percentage of GPs with ACREDITED NDT training centres offering ISO 9712 training | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs that have conducted training activities to local and FOREIGN industries | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs that have conducted activities to local and FOREIGN industries | Infrastructure | Excellent |  | Online survey |
| **Capacity** |  |  |  |  |
| Number of trained personnel at the GP organisation level | Capacity | Adequate |  | Online survey |
| Percentage of GPs with certified personnel in at LEAST ONE but not all the advanced techniques (RT, UT, MT, PT, ET) through the national NDT certification scheme | Capacity | Adequate |  | Online survey |
| Percentage of GPs with certified personnel in ALL advanced techniques (RT, UT, MT, PT, ET) through the national NDT certification scheme | Capacity | Good |  | Online survey |
| Percentage of GPs with certified in advanced techniques (RT-D, PAUT, TOFD, PEC, etc) in addition to the conventional methods (RT, UT, MT, PT, ET). | Capacity | Excellent |  | Online survey |
| **Self reliance** |  |  |  |  |
| Percentage of GPs with a National certification SCHEME on NDT established | Capability | Adequate |  | Online survey |
| Percentage of GPs with a established National Certification BODIES on NDT | Infrastructure | Good |  | Online survey |
| Percentage of GPs with NDT societies established | Infrastructure | Good |  | Online survey |
| Percentage of GPs with NCB that have been accepted for registration under ICNDT MRA | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs with NCB for NDT accredited to ISO 17024 | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs with NDT societies that are a signatory to ICNDT MRA | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs with NDT societies registered with APFNDT | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs with NDT societies registered with ICND | Infrastructure | Excellent |  | Online survey |
| Percentage of GPs with NDT societies registered with APFNDT and ICNDT | Infrastructure | Excellent |  | Online survey |
| **Incorporate criteria 1,2,4 of previous rubric Ask Julian about this** |  |  |  |  |

## Criterion 2: **Increased scope and scale of NDT demand and use**

Note: Remember to include a note saying that all the indicators refer to the result of having participated in the RCA programme of IAEA.

Table 1: Key evidence for criterion 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Evidence | Dimension | Standard | Finding | Source |
| **Awareness** |  |  |  |  |
| Percentage of GPs that have initiated activities to create AWARENESS among industrial organisations about the benefits of NDT technology for QA and QC | Awareness | Adequate |  |  |
| Percentage of GPs that have successfully trained personnel in the introduced technology as a result of being part of the RCA programme. What is the difference with the capacity dimension of criterion 1 [for Julian] | Capacity | Adequate |  |  |
| **Knowledge, Attitudes, and Practices** |  |  |  |  |
| Percentage of GPs that are more CONCERNED about applying NDT technology. Is there a list of expected knowledge or attitudes that we could use to prove this? | Knowledge of NDT benefits | Good |  |  |
| Percentage of GPs that are more INTERESTED about applying NDT technology | Positive Attitude towards NDT | Good |  |  |
| Percentage of GPs that started APPLYING NDT technology in the industrial sectors for the QA and QC of industrial components | Positive Practice towards NDT | Good |  |  |
| % of GPs that have APPLIED NDT technology in the industrial sector AND have achieved better (at least one of:) 1) controlled manufacturing, 2) lower production costs, 3) Ensuring material quality, 4) greater product integrity. [We need to ask for baseline (2000) and today’s values for each of this dimensions] | Positive Practice towards NDT | Excellent |  |  |
| Percentage of GPs that have established R&D activities on NDT technology | Positive Practice towards NDT | Good |  |  |
| Number of knowledge products developed through R&D by publishing articles, organising international seminars, and conferences | Positive Practice towards NDT | Excellent |  |  |

## Criterion 3: **Improved health and safety**

[Brief description of relevance and background of this criteria] \*Julian

# Annex C: Economic Analysis

# Annex D: Theory of Change

# Annex E: Criteria and standards

# Work cited