

Workshop on the Integrated Risk Assessment Method/Easy Tools

Minimum inspection programme

Vladimir KAISER

The Inspectorate of the Republic of Slovenia for the Environment and Spatial Planning

Zagreb, 6-7 October 2015

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Is a programme enough?

ANNUAL PROGRAMME

+

HUMAN RESOURCES

+

TECHNICAL RESOURCES

USUALY NOT
ENOUGH
INSPECTORS

2

Lack of inspectors?

What can we do if we do not have enough inspectors to execute all planned inspections from programme:

1. WE GET MORE INSPECTORS.
2. WE ADJUST OUR PROGRAMME

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How to get more inspectors?

??????

I can not tell....
It is beyond my imagination.

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How to adjust the programme?

The annual programme we can separate into two parts:

1. **The part that should not be changed.** It consist of OBLIGATORY INSPECTIONS (IED, SEVESO, ...). We must have enough inspectors to execute that part of our programme.
2. **Adjustable part of a plan** - NON OBLIGATORY INSPECTIONS (non IED, petrol stations, ...). We adjust that part of programme according to available human resources.

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The programme adjustment

1. We separate **obligatory inspections** from **non obligatory inspections**. We do not change the programme regarding obligatory inspections.
2. We arrange non obligatory inspections according to category and last date of inspection.
3. For non obligatory inspections we decide what part of each category we will inspect next year (50% of 1, 30% of 2, 20 % of 3).
4. We calculate a number of non obligatory inspections for each category.
5. We choose non obligatory inspections according to calculation and list of non obligatory inspection.

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A calculaton of non obligatory inspection

N = a number of inspection in programme

N_{max} = a number of inspection we are able to execute

N_o = number of obligatory inspection (the programme)

N_n = number of non obligatory inspection (calculation)

$N_n(1)$ = number of non obligatory inspection - category 1

$W(1)$ = a share of category 1 (%)

If $N > N_{max}$ then

$$N_n = N_{max} - N_o$$

$$N_n(1) = N_n * W(1) / 100$$

$$N_n(2) = N_n * W(2) / 100$$

$$N_n(3) = N_n - (N_n(1) + N_n(2))$$

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Which non obligatory inspection to choose

- Since we have to adjust the programme we may assume that number of non obligatory inspections from original programme is bigger than calculated number.
- We have to decide which non obligatory inspections to add to adjusted programme.
- We do it according following rules:
 1. First take installations that have not been inspected yet.
 2. Next take installations with oldest date of last inspection.
 3. At the end take installations with latest date of last inspection.

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Which non obligatory inspection to choose

Installation	Category	Date of last inspection
NONIED24	2	
NONIED32	2	
NONIED203	2	
NONIED206	2	
NONIED03	2	5.3.2013
NONIED02	2	3.6.2013
NONIED92	2	7.7.2013
NONIED93	2	8.7.2013
NONIED180	2	8.7.2013
NONIED94	2	9.7.2013
NONIED181	2	9.7.2013
NONIED95	2	10.7.2013
NONIED182	2	10.7.2013
NONIED96	2	11.7.2013
NONIED183	2	11.7.2013
NONIED98	2	13.7.2013
NONIED185	2	13.7.2013
NONIED99	2	14.7.2013
NONIED186	2	14.7.2013

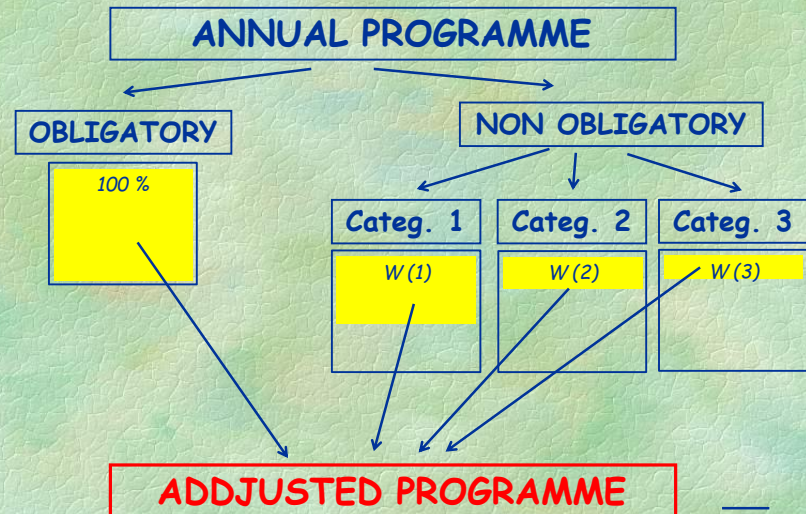
1. Not inspected yet

2. Oldest dates

3. Latest dates

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The programme adjustment



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THE END