

Work dosimetry system at OKG NPP, Sweden



Work dosimeter

Initiation



Turnstile

Personal Surface Contamination Control Monitor



Work dosimeter

- **Initiation upon entering RCA**
 - **Reset**
 - **Access control**
 - **Alarm settings**
 - Dose limits and constraints
 - Radiation Work Permit
 - Dose history
 - **Personal information**



Work dosimeter

- Reading upon exiting RCA
 - Dose and dose rates per 15 s
 - Alarms
 - Movement detection
 - Readers in RCA



Work dosimeter system

- Dose limits and Constraints
- Doses and dose rates
- Operational and Maintenance system ➡ Work Order Permit ➡ Radiation Work Permit ➡ Alarm levels
- Access control system
- Alarms from Personal Surface Contamination Control Monitor

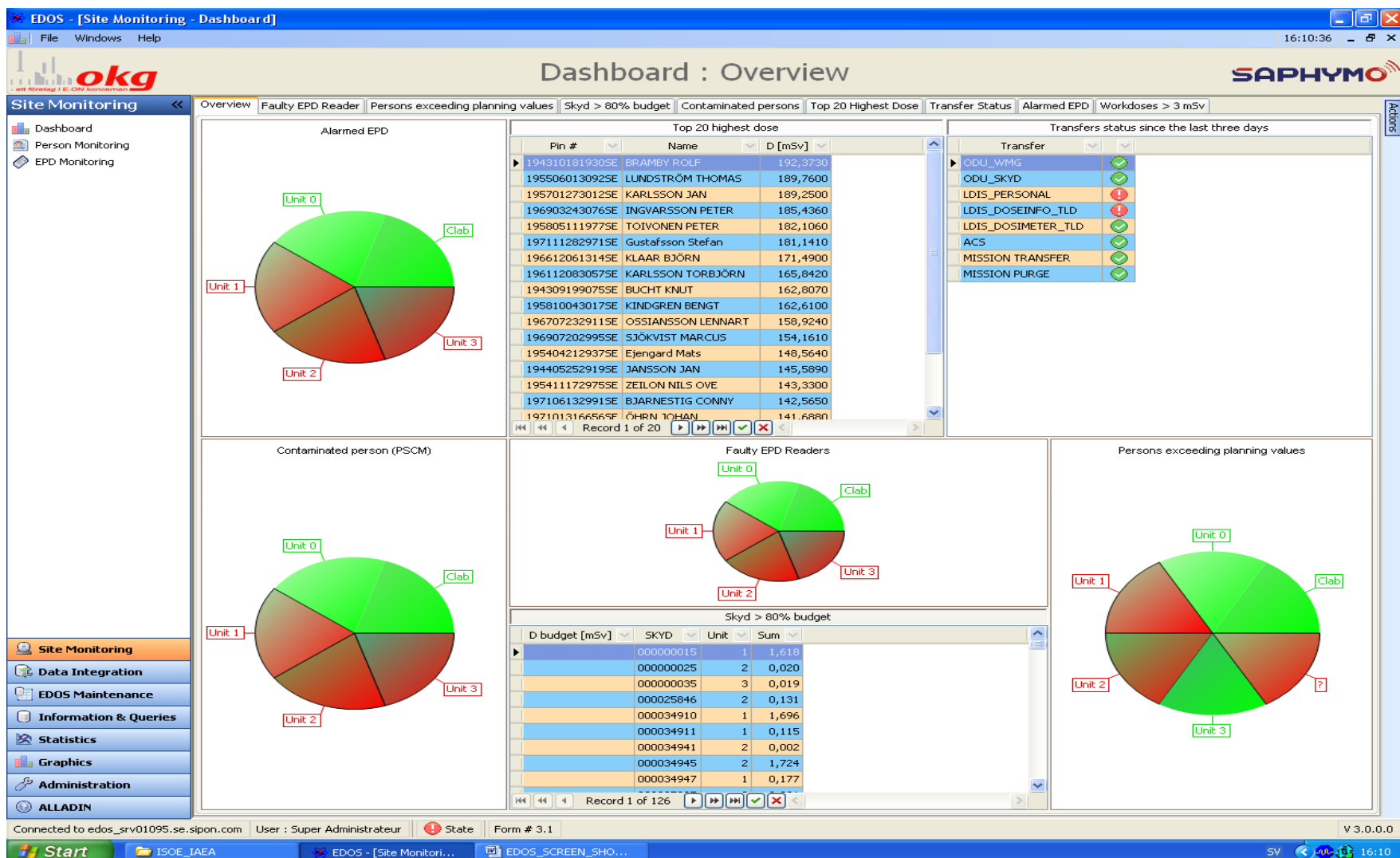
Work dosimeter system

- **Different levels of competence**
- **Education**
- **Instructions**
- **Support team – RP, IT, Maintenance**
 - **Designated performers**
- **Quality assurance**
 - **Updated every 20 mins or 12 hours**
 - **Controls vs TLD doses**

Quick follow up

- **Pre-set search**
- **Graphic mode**
- **Individual and work task doses**
- **Dose rates**
- **Exceeding of dose limits or constraints**
- **Access control**
- **Number of contaminated persons**
- **Standard information on dashboard**
 - **easily followed up**
 - **response action by the RP at the workplace**

Quick follow ups



Follow up

- **Operational Experience**
- **Performance Indicators**
- **Summary of doses**
- **Info to departments**
- **Compare work doses with TLD doses**
- **History to Operational and Maintenance System**
- **Single out particular jobs, work categories**
- **Budget planning**
- **Trending**
- **Contamination**

EDOS - [EDOS Maintenance - Work Dose]

File Windows Help 15:31:07

Work Dose Maintenance : Steps per workdose

SAPHYMO

EDOS Maintenance << WorkDose List WorkDose Edition Multiple Changes Error List Maintenance Logs Steps per mission EPD Alarm Log PSCM Contamination Log Steps per workdose Deviation from Planning Values

WorkDose Maintenance << Work Dose SKYD Personal Maintenance Internal Dose Maintenance

WorkDoses

Mission	SKYD	Workdose id	Starting date	Ending date	D [mSv]	
906152250121307	000105260	1359514	2009-06-16 02:33:04	2009-06-16 04:19:34	0,0100	Gan
906152250121307	000099344	1359513	2009-06-15 22:50:14	2009-06-16 02:33:04	0,0140	Gan
906150153051307	000099551	1357846	2009-06-15 01:53:07	2009-06-15 05:34:51	0,0060	Gan
906150033431307	000099551	1357803	2009-06-15 00:33:44	2009-06-15 01:43:00	0,0130	Gan
906140548401307	000101220	1357169	2009-06-14 05:55:53	2009-06-14 07:32:06	0,0240	Gan
906132342421307	000099551	1357137	2009-06-13 23:42:44	2009-06-14 04:34:48	0,0090	Gan
906130029141307	000099551	1356346	2009-06-13 00:29:15	2009-06-13 04:34:53	0,0290	Gan
906120019421307	000110607	1354955	2009-06-12 00:19:44	2009-06-12 05:24:19	0,0500	Gan
906110534131307	000000035	1353271	2009-06-11 05:34:15	2009-06-11 06:27:07	0,0010	Gan
906110340321311	000101220	1353260	2009-06-11 03:40:33	2009-06-11 05:28:49	0,0330	Gan
90609232131307	000099344	1351413	2009-06-10 04:16:59	2009-06-10 05:46:35	0,0060	Gan
906092332131307	000105360	1351412	2009-06-09 23:32:15	2009-06-10 04:16:59	0,0260	Gan
906090029431307	000101220	1349366	2009-06-09 03:16:32	2009-06-09 05:48:21	0,0080	Gan
906090029431307	000110607	1349365	2009-06-09 00:29:45	2009-06-09 03:16:32	0,0050	Gan
905210107351303	000106510	1319305	2009-05-21 01:07:36	2009-05-21 03:37:37	0,0010	Gan
905200038001303	000106510	1317032	2009-05-20 00:38:02	2009-05-20 04:36:28	0,0010	Gan
905192059151303	000106510	1316878	2009-05-19 20:59:16	2009-05-19 23:51:31	0,0010	Gan
905190137331303	000106510	1314535	2009-05-19 01:37:34	2009-05-19 04:16:30	0,0010	Gan
905180019131315	000106510	1312255	2009-05-18 00:19:14	2009-05-18 03:44:50	0,0020	Gan
905162213251315	000106510	1311249	2009-05-16 22:13:28	2009-05-17 05:45:58	0,0020	Gan
905160002281304	000106510	1310124	2009-05-16 00:02:29	2009-05-16 06:10:33	0,0020	Gan
905150034371301	000106510	1308107	2009-05-15 00:39:02	2009-05-15 05:29:38	0,0270	Gan
905140132091315	000106510	1305581	2009-05-14 01:32:11	2009-05-14 02:56:26	0,0010	Gan
905130016191303	000102081	1303273	2009-05-13 00:25:39	2009-05-13 04:02:48	0,0410	Gan
905112325551303	000000035	1300652	2009-05-11 23:25:57	2009-05-12 01:07:29	0,0010	Gan
904130033191315	000100793	1223585	2009-04-13 00:33:20	2009-04-13 03:37:13	0,0100	Gan
904120051001315	000106510	1221640	2009-04-12 00:51:01	2009-04-12 06:12:51	0,0060	Gan

Record 43 of 58

Steps

Id	Time	EPD R.	Loc.	Compl.	EPD	Cont.
0	2009-06-09 23:32	Initialization	West Wall	☒	☐	☐
1	2009-06-09 23:39	Inner entry	P1.227	☒	☐	☐
2	2009-06-10 04:16	Changing S...	N1.05	☒	☐	☐
3	2009-06-10 05:46	Outer Exit	P1.233	☒	☐	☐

Record 1 of 4

Events

Type	D [mSv]	Dose	date	Data	Code
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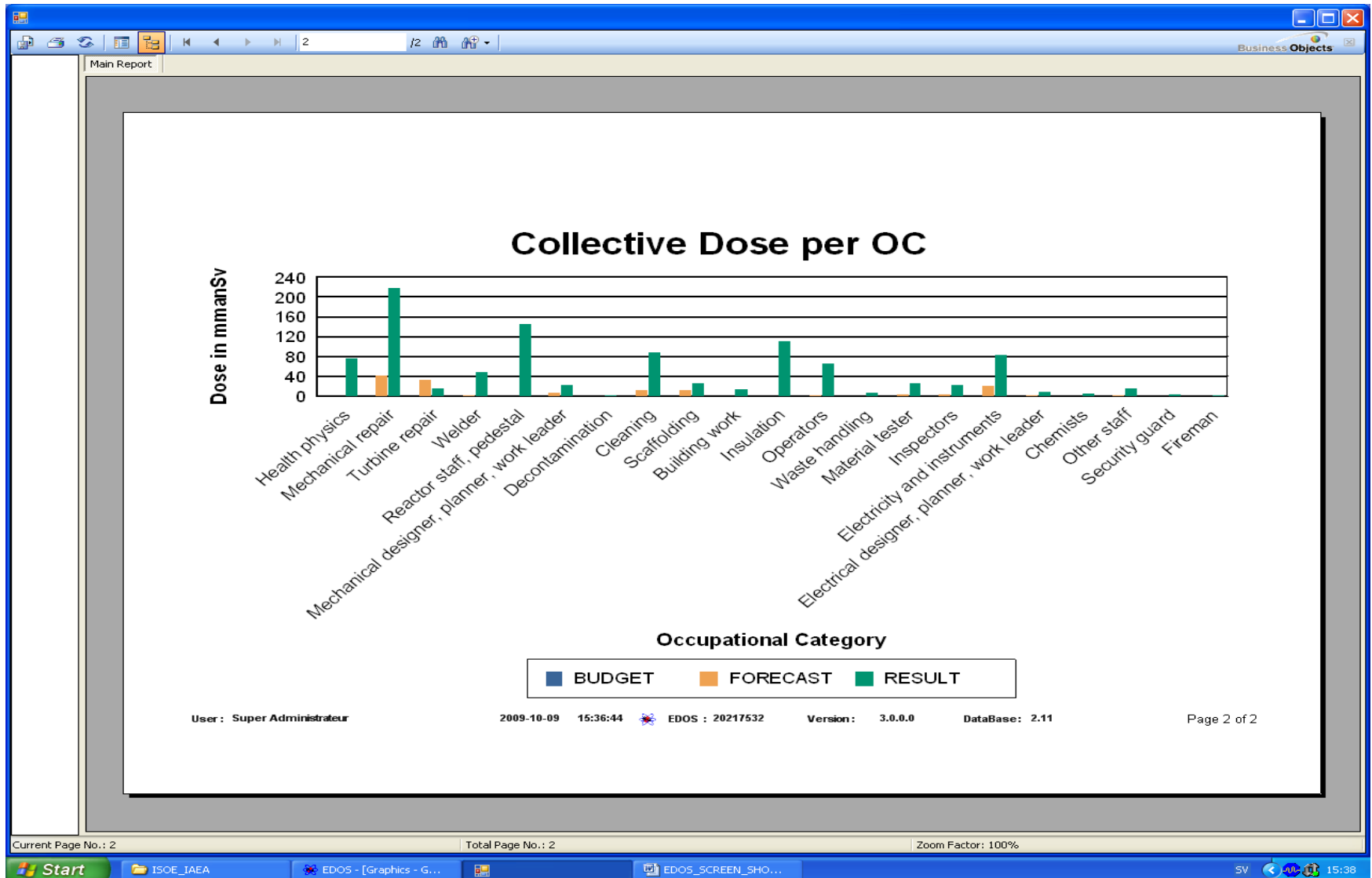
Record 0 of 0

Connected to edos_srv01095.se.sipon.com User : Super Administrateur State Form # 2.9

Start ISOE_IAEA EDOS - [EDOS Maintenance] EDOS_SCREEN_SHO...

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Graphic report



Follow up

- **Designated performers**
- **Follow up on daily, weekly and monthly basis**
 - Alarms
 - Occupational categories
 - Selected jobs
 - Individuals
- **Lower the dose – ALARA programme**
- **Limit the contamination**
- **Budget work**

Thank you for your attention!