

Answer1	Answer2	Answer3	Answer 4	Answer 5	Answer 6	Answer 7	Answer 8
1;29 T	1;29 T	1;29 T	1;29 T	1;29 T	1;29 T	1;29 T	1; 29 T
12;8 T	3;1 T	3;10 T	2;21 T	17;18 T	17;18 T	18;19 W	3; 10 T
17;18 T	5;11 F	5;11 F	3;10 T	17;19 T	18;19 W	3;1 T	5; 11 F
18;19 W	6;25 T	6;25 T	5;11 F	18;19 w	17;19 W	6;25 T	6; 25 T
2;21 T	8;26 T	8;12 T	6;25 T	20;22 T	3;1 T		8; 26 T
20;22 T	17;18 T	20;22 T	7;33 T	21;2 T	30;14 W		17; 18 T
24;16 T	17;19 W	21;2 T	8;26 T	22;21 F	5;11 F		17;19 W
27;6 T	23;17 T	24;16 T	20;22 T	23;17 T	6;25 T		17;23 T
3;1 T	30;14 W	27;5 F	24;16 T	23;18 T	8;26 T		18;19 W
32;1 T		28;3 F	27;5 F	23;19 T			18;23 T
5;11 F		30;14 W	17;18 T	24;16 T			19;23 T
6;25 T		32;1 T	17;19 T	27;25. T			20; 22 T
7;33 T		33;7 T	17;23 T	3;1 T			24; 16 T
30;14 W		18;19 T	28;23 F	5;12 F			28;3 F
8;26 T		18;23 T		6;25 T			28;10 F
				8;26 T			30; 14 W
							33; 7 T

count_ count_T	count_ count_T	count_ count_T	count_ count_T	count_ count_T	count_ count_T	count_ count_T	count_ count_T
15,00 12,00	9,00 6,00	15,00 11,00	14,00 11,00	16,00 13,00	9,00 5,00	4,00 3,00	17,00 11,00
count_W	count_W	count_W	count_W	count_W	count_W	count_W	count_W
2,00	2,00	1,00	0,00	1,00	3,00	1,00	3,00
precision recall	precision recall	precision recall	precision recall	precision recall	precision recall	precision recall	precision recall
0,92 0,71	0,86 0,35	0,79 0,65	0,79 0,65	0,87 0,76	0,83 0,29	1,00 0,18	0,79 0,65

ground truth T	ground truth W	Precision_max	1,00	Recall_max	0,76
17,00	4	Precision_min	0,79	Recall_min	0,18
		Precision_ave	0,85	Recall_ave	0,53

Answer1		Answer2	Answer3
10, 3	T	3,1 T	1,29 T
16, 24	T	17,18 T	1,32 T
19, 23	T	2,21 T	14,30 W
20, 22	T	20,22 T	16,24 T
21, 2	T	23,18 T	17,18 T
29, 1	T	24,16 T	17,19 W
32, 1	T	29,1 T	17,23 T
3, 28	F	32,1 T	18,23 T
8, 12	T	33,7 T	19,23 T
		8,12 T	2,21 T
		23,17 T	20,22 T
			25,27 T
			3,10 T
			6,25 T
			7,33 T

count_	count_T	count_	count_T	count_	count_T
9,00	8,00	11,00	11,00	15,00	13,00
	count_W		count_W		count_W
	0,00		0,00		2,00
precision	recall	precision	recall	precision	recall
0,89	0,47	1,00	0,65	1,00	0,76

ground truth T	ground truth W
17,00	4

Precision_max	1,00	Recall_max	0,76
Precision_min	0,89	Recall_min	0,47
Precision_ave	0,96	Recall_ave	0,63

Answer1	Answer2	Answer3	Answer 4	Answer 5	Answer 6	Answer 7	Answer 8	Answer 9
1;6 T	1;6 T	1;6 T	1;6 T	1;3 F	1; 6 T	1;6 T	1;6 T	1;6 T
1;7 F	3;7 W	3;7 W	3;7 W	2;6 T	3; 7 W	3;7 W	3;7 W	3;7 W
2;14 T	4;15 F	4;15 F	5;14 F	3;7 W	4; 15 F	4;15 F	4;15 F	4;15 F
3;6 T	5;14 F	7;19 F	9;18 T	5;14 F	9; 18 T	10;11 W	9;18 T	7;19 F
3;7 W	8;13 T	10;11 W	16;15 T	9;18 T	19; 9 F	14;19 W	14;19 W	10;11 W
4;15 F	10;11 W	17;21 F		9;19 F				17;21 F
4;16 T	17;21 F			10;11 W				
5;14 F				12;13 F				
6;18 F				15;16 T				
7;19 F				17;21 F				
9;18 T								
10;7 F								
11;17 W								
12;13 F								
14;5 F								
15;16 T								
17;21 F								
19;2 F								

count_fnd	count_T	count_fnd	count_T	count_fnd	count_T	count_fnd	count_T	count_fnd	count_T	count_fnd	count_T	count_fnd	count_T	count_fnd	count_T	count_fnd	count_T
18,00	6,00	7,00	2,00	6,00	1,00	5,00	3,00	10,00	3,00	5,00	2,00	5,00	1,00	5,00	2,00	6,00	1,00
count_W		count_W		count_W		count_W		count_W		count_W		count_W		count_W		count_W	
2,00		2,00		2,00		1,00		2,00		1,00		3,00		2,00		2,00	
precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall
0,38	0,30	0,40	0,10	0,25	0,05	0,75	0,15	0,38	0,15	0,50	0,10	0,50	0,05	0,67	0,10	0,25	0,05

ground truth T ground truth W
20,00 10

Precision_max 0,75 Recall_max 0,30
Precision_min 0,25 Recall_min 0,05
Precision_ave 0,45 Recall_ave 0,12

Answer1	Answer2	Answer3
3,5 T	3;5 T	1;6 T
6,3 T	3;7 W	3;7 W
5,6 W	8;13 T	1;10 T
7,3 W	8;20 T	16;5 F
8,9 F	3;14 W	16;4 T
10,11 W	4;16 T	11;17 F
8,12 T	15;16 T	19;3 W
8,13 T	19;3 W	20;8 T
14,3 W	8;20 T	21;16 T
14,7 W		
15,16 T		
16,4 T		
10,17 F		
18,9 T		
19,14 W		
19,3 W		
20,13 T		
20,8 T		
20,12 T		
21,16 T		
21,4 T		
21,15 T		

count_fnd	count_T	count_fnd	count_T	count_fnd	count_T
19,00	11,00	6,00	4,00	6,00	3,00
	count_W		count_W		count_W
	6,00		2,00		1,00
precision	recall	precision	recall	precision	recall
0,85	0,55	1,00	0,20	0,60	0,15

ground truth T	ground truth W
20,00	10

Precision_max 1,00	Recall_max
Precision_min 0,60	Recall_min
Precision_ave 0,82	Recall_ave

1:	The British market requires tea and excludes any ring tone.	1
2:	The machine shall offer a selection of alcoholic beverages.	0
3:	The machine shall offer, as beverages, Coffee and Cappuccino or Tea.	1
4:	The machine shall not return to idle after the beverage is taken.	0
5:	The machine shall offer hot chocolate as a beverage option.	0
6:	The machine shall only offer Coffee as a beverage option in the British market.	0
7:	The machine shall not offer Cappuccino as a beverage option.	0
8:	After inserting a suitable coin, the user shall choose a beverage and select the amount of sugar.	1
9:	The machine shall only offer coffee on odd-numbered days and tea on even-numbered days.	0
10:	The machine shall always play a ringtone after beverage delivery, even if the user has selected Tea as their beverage.	0
11:	A ringtone possibly has to be played after beverage delivery.	1
12:	The user shall choose a beverage and select the amount of cream instead of sugar.	0
13:	The user shall not be able to select the amount of sugar in their beverage.	0
14:	The machine shall offer, as beverages, Coffee and Cappuccino or Hot Chocolate.	0
15:	The machine shall never return to an idle state after the beverage is taken. Instead, it shall continue to display advertisements until	0
16:	After the beverage is taken, the machine returns idle.	1
17:	The machine shall play a ringtone before beverage delivery on weekdays and not on weekends.	0
18:	The machine shall always offer coffee.	1
19:	The machine shall not offer Cappuccino as a beverage option.	0
20:	The user shall choose a beverage and select the amount of sugar before inserting a coin.	0
21:	The machine shall return to the main menu after beverage delivery on weekends and not on weekdays.	0

Groud_truth_T		Groud_truth_W
1;6		09;14
2;14		8;12
3;6		10;11
4;16		14;19
9;18		5;6
15;16		3;7
8;13		3;14
2;6		7;14
3;5		3;19
6;14		
13;20	count	10,00
8;20		
12;20		
4;21		
15;21		
16;21		
1;10		
2;6		
2;9		
6;9		
count	20,00	

Answer1	Answer2	Answer3	Answer 4	Answer 5	Answer 6	Answer 7	Answer 8
Answer2 F	1;3 F	3;6 F	3;6 F	3;6 F	3;6 F	1;3 F	3;6 F
Answer3 T	6;22 F	7;41 T	29;52 F	7;41 T	7;41 T	5;8 F	7;41 T
Answer4 F	7;41 T	8;29 F	7;41 T	29;52 F	8;29 F		8;29 F
Answer5 F	8;29 F	25;42 F	38;27 F	2;48 T	30;42 F		17;33 F
Answer6 F	21;42 F	48;2 T	42;6 T	25;33 F	2;48 T		42;52 T
Answer7 T	30;52 F		30;6 F				48;2 T
	48;2 T		21;27 F				
			1;48 F				
			1;48 F				

count_	count_T	count_	count_T	count_	count_T	count_	count_T	count_	count_T	count_	count_T	count_	count_T	count_	count_T
6,00	2,00	7,00	2,00	5,00	2,00	9,00	2,00	5,00	2,00	5,00	2,00	2,00	0,00	6,00	3,00
	count_W		count_W		count_W		count_W		count_W		count_W		count_W		count_W
	0,00		0,00		0,00		0,00		0,00		0,00		0,00		0,00
precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall	precision	recall
0,33	0,10	0,29	0,10	0,40	0,10	0,22	0,10	0,40	0,10	0,40	0,10	0,00	0,00	0,50	0,15

ground truth T	ground truth W
20,00	0

Precision_max	0,50	Recall_max	0,15
Precision_min	0,00	Recall_min	0,00
Precision_ave	0,32	Recall_ave	0,09

Answer1		Answer2		Answer3		Answer4	
7;41	T	3;6	F	7;41	T	3, 52	T
7;40	T	95;57	T	7;40	T	3, 35	F
3;42	T	99;39	F	3;42	T	6, 35	F
2;48	T	98;106	T	6;42	T	7, 41	T
3;52	T	30;77	F	3;52	T	42, 52	T
8;57	T	81;91	F	6;52	T	2, 48	T
77;61	T	53;91	F	2;48	T	17, 106	F
30; 61	T			8;57	T	29, 109	T
75;109	T			57;85	T	75, 109	T
29;109	T			57;95	T	61, 77	T
17;109	F			30;61	T	98, 106	T
75;17	F			61;77	T	17, 98	T
74;106	T			29;75	F	57, 85	T
74;17	F			29;109	T	57, 95	T
98;106	T			74;98	T		
98;17	T			74;106	T		
74;98;	T			98;106	T		

count_	count_T	count_	count_T	count_	count_T	count_	count_T
17,00	14,00	7,00	2,00	17,00	16,00	14,00	11,00
count_W		count_W		count_W		count_W	
0,00		0,00		0,00		0,00	
precision	recall	precision	recall	precision	recall	precision	recall
0,82	0,70	0,29	0,10	0,94	0,80	0,79	0,55

ground truth T	ground truth W
20,00	0

Precision_max	0,94	Recall_max	0,80
Precision_min	0,29	Recall_min	0,10
Precision_ave	0,71	Recall_ave	0,54

3	The System Administration Module shall only be accessible through a Mac-compatible client.	0
6	The System Administration Module shall be accessible only through a macOS-compatible client.	0
7	The System Administration Module shall use a non-relational database back-end.	0
8	System Administration shall not be accessible with screen-reading software or other accessibility software programs.	0
17	The System Administration Module shall only support up to 10 locations.	0
29	If web-browser based, System Administration shall be accessible through Google Chrome (v.10.0 and later) and Apple Safari (v.5.0 and later) only.	0
30	The System Administration Module shall operate on a Windows server.	0
42	System Administration shall be accessible through a mobile application only.	0
48	The system shall only provide batch processing and not real-time processing.	0
75	If web-browser based, System Administration shall not be accessible through Microsoft Internet Explorer or Mozilla Firefox.	0
77	System Administration shall operate on a Windows server only.	0
85	The System Administration Module shall not be accessible with any accessibility software.	0
95	System Administration shall not be accessible with screen-reading software or any other accessibility software.	0
98	System Administration must support a library system with 100 locations, 50 million circulations, purchasing and processing over 1 million items per year.	0
106	The System Administration Module must not support a library system with more than 25 locations, 10 million circulations, purchasing and processing over 250,000 items per year.	0
1	System provides an administrative dashboard displaying last full and incremental backup; last planned and unplanned system reboot; last software upgrade; current software version; transactions waiting to be processed; size of log-files; current count of records by record type (item, bibliographic, patron etc), database utilization (size, processes running).	1
2	The system provides real-time processing.	1
4	Record sets can be the basis for batch field updates; can be used as a limiting scope for queries; can be used to delete original records with the ability to review prior to deletion, write errors to a log file, and undo one or more deletions.	1
5	System administrative staff has full visibility and control of user privileges.	1
9	Indicators can be limited to a single branch or set to systemwide.	1
10	System allows creation and modification of loan rules that allow or disallow check-out of items, calculate loan periods, and determine renewal limits.	1

11	System logs data changes (such as record deletions) and provides "undo" functionality. Ideally, system provides revision control.	1
12	Requesting rules may evaluate patron type, current number of holds, current patron account balance, item type, item status, owning location code, and other criteria.	1
13	System administrators can create report templates that are available to front-line staff, and can be run as is or modified to the staff person's particular needs.	1
14	SFTP is supported in both active and passive modes, configurable per vendor.	1
15	System provides a dedicated interface for creating new patron accounts.	1
16	Depending on assigned privileges, staff can view all patron and item fields; patrons can access only selected fields. Record changes are applied in a reasonable way, with prompts to warn when a record has been changed since it was displayed.	1
18	Requesting rules also specify whether staff with specific privileges or roles can override specific criteria.	1
19	Patron data is secure in all transfers to and from the system.	1
20	System provides a management console displaying workstations running client software; workstation name and IP address; and utilities for managing and killing client sessions.	1
21	System Administration Module shall provide a development and training environment with the ability to migrate configurations to a production environment.	1
22	System provides customizable 'Rules of Suppression' that specify whether patrons and staff can view authority, bibliographic, order, and item records in staff and public (OPAC) interfaces.	1
23	System reports for each record type current record number, current number of records, number deleted, and number purged.	1
24	System supports scheduling of maintenance tasks, reports, and data exports.	1
25	The System Administration Module is part of an enterprise-level Library Automation System.	1
26	System Administration Module shall produce standards-compliant HTML.	1
27	System provides capability to perform live incremental and full backups	1
28	System supports administrator-programmable and user-programmable macros and/or keyboard shortcuts.	1
31	System provides a dashboard for locating and viewing log files.	1
32	System upgrades and updates include written guidelines for updating servers and clients. Includes list of new, changed, and removed features.	1
33	System Administration process are consolidated at a central location, and accept input and provide services to multiple locations.	1
34	1 System supports secure protocols, including SFTP, SSL, and SSH.	1
35	Client software can be managed with VNC and Remote Desktop.	1

36	New staff account creation process provides configurable templates for account administrator use; provides granular privileges for account creation, modification, and deletion.	1
37	Read and write permission to individual configuration files can be assigned to users and groups.	1
38	Log files can be reviewed without stopping system.	1
39	Documentation is specific to the particular version of the software in use at library. Documentation is web-based, indexed, organized by function, and easily searchable.	1
40	System runs on a fully relational, SQL-based database system.	1
41	System Administration Module shall use a fully relational database back-end.	1
43	System provides a server management console including software shutdown utility, software startup utility, server shutdown utility, server restart utility.	1
44	System supports use of third-party backup software such as EMC NetWorker.	1
45	Access to record numbers is controlled at the user/group level.	1
46	System administration staff can view and manage jobs scheduled by other staff.	1
47	User rights and privileges will be controlled through security groups and/or "roles" that allow access control for individuals, workgroups, and arbitrary staff groups.	1
49	MARC bibliographic and authority records can be imported and exported, singly and in batch, all fields or selected fields, to and from vendors including OCLC.	1
50	Administrators control staff access to tables and fields.	1
51	Alert thresholds are configurable.	1
52	System Administration shall be accessible through a web-browser or a Windowscompatible client.	1
53	Records may be visible to specific workgroups only; to all staff and patrons at specific locations; or to all staff and all patrons.	1
54	Record types include patron, bibliographic, item, order, invoice, etc.	1
55	The System Administration Module relies on the data structures and functionality of an enterprise-level Library Automation System, including Acquisitions and Cataloging modules.	1
56	System provides fine-grained permissions to allow or disallow staff to run specific reports, and/or to run ad hoc reports on specific sets of data.	1
57	System Administration shall be accessible with screen-reading software, screenmagnification software, and other software programs designed to increase accessibility.	1
58	Loan rules can access check-out location open/closed schedule in calculating due date.	1
59	System documentation is library-specific and follows standard formats for technical documentation.	1
60	Client software installation and updates must be centrally managed, using standard or proprietary network management tools, allowing streaming updates from server.	1

61	System Administration shall operate on a Linux or Solaris server.	1
62	Shortcut keys may be assigned to macros (e.g. 'Insert Field') or to text strings. Macros are centrally managed on server, can be imported from and exported to individual users, and can be restricted for use and/or editing through centrally managed permissions.	1
63	System supports creation of custom dashboards that display current and historical data about system performance, record creation and modification, circulation transactions, etc.	1
64	Alerts can be sent to unlimited number of recipients via any or all alert methods.	1
65	System provides a user-friendly interface for designing queries against all record types.	1
66	61. of data and transaction logs.	1
67	Administrators can create dashboards and give access to selected users and groups.	1
68	System supports an unlimited number of record sets, with the ability to import and export set members in batch.	1
69	Individual logins allow user-level preferences and audit trail.	1
70	System provides a dedicated interface for creating new staff accounts.	1
71	Jobs can be scheduled in sequence ("start job B when job A finishes") and can be modified or cancelled at any time prior to starting.	1
72	For any patron record or item record, staff can identify where it is in use (location, user, date and time placed).	1
73	System supports SMTP for email transport.	1
74	System Administration must support a library system with 50 locations, 20 million circulations, purchasing and processing over 500,000 items per year. It is highly desirable that searches and reports can be processed during open hours without disrupting other system functions.	1
76	System provides dashboard of performance monitoring and management tools. Identification of processes with process ID, owner username, IP address (if applicable), CPU utilization, memory utilization, run time. Runaway processes are identified.	1
78	System status is represented by visual indicators (e.g. green and red lights).	1
79	System provides a single console with access to all configuration files.	1
80	Alerts can be sent via administrative dashboards, email messages, and text messages.	1
81	Logs can be enabled, disabled, and set to a specific retention threshold.	1
82	System provides access to all configuration files.	1
83	All client configuration files are server based; configurations can be exported and imported between clients.	1
84	System provides a circulation dashboard showing key performance indicators such as check-outs per hour, check-ins per hour, holds placed per hour, holds paged per day, etc.	1
86	Loan rules also specify whether a specific criteria may be overridden by staff with specific privileges or roles.	1

87	Staff can be given permission to schedule tasks, reports, and data exports.	1
88	System provides access to root shell.	1
89	System provides a single interface for reviewing and controlling scheduled tasks, including staff-scheduled tasks, automated reports, scheduled imports and exports, software updates, etc.	1
90	Staff and group accounts are independent from workstations; client install should not be tied to a specific location.	1
91	System provides full access to all log files.	1
	The software developer shall provide a thorough high-level description of major processes, including bibliographic record import and export, validation of bibliographic records against internal and external authority sources, and standard reports.	1
92		
	The software developer shall provide complete data specifications for authority records, bibliographic records, order records, item records, hold/request records, and other records maintained or accessed by the System Administration Module.	1
93		
94	The System Administration Module interacts with a patron interface, also known as an Online Public Access Catalog (OPAC).	1
95		
96	System provides full support for SNMP and supports monitoring of system resources, including disk space, CPU load, memory load, system processes, system interfaces and ports.	1
97	Patron account creation process provides configurable templates for staff use; supports field validation and required fields; provides configurable defaults.	1
98		
99	The system shall provide an online, hierarchical, and cross-linked help system in HTML that describes and illustrates all system functions.	1
100	System allows creation and modification of requesting rules that determine whether a patron can place a hold on an item.	1
101	Imported batches can be maintained and manipulated as selection lists .	1
102	System supports restrictions based on business rules, e.g. restrictions on deleting item records that are in checked-out status, or restrictions on deleting bibliographic records with existing holds.	1
103	Ability to set thresholds on the length of time records are locked and provide, for all record types, a list of records in sustained use/locked condition.	1
104	Imported records can overlay existing short or full bibliographic records.	1
105	Staff can select fields to query; select values from picklist of possible values; select regular expressions from drop-down menu, and use a full range of Boolean operators.	1
106		
107	Loan rules may evaluate patron type, current number of items checked out, current patron account balance, item type, item status, owning location code, check-out location code, and other criteria.	1

- 108 The System Administration Module interface with a variety of vendor websites, via published APIs and/or automated transfer of standard-format data files (e.g. USMARC21, EDIFACT). 1
- 109 If web-browser based, System Administration shall be accessible through Microsoft Internet Explorer (v.6.0 and later) and Mozilla Firefox (v.2.0 and later). 1

Groud_truth_T

3;52

3;42

6;52

6;42

7;40

7;41

8;57

17;74

17;98

29;109

30;61

42;52

2;48

75;109

77;61

85;57

95;57

98;74

98;106

74;106

count 20

Answer1		Answer2		Answer3		Answer4		Answer5		Answer6		Answer7		Answer8	
1;3	F	1;2	F	1;2	F	1;2	F	1;3	F	1;3	F	1;2	F	1;2	F
4;8	T	3;12	F	4;8	T	3;12	F	2;3	F	3;12	F	3;12	F	3;12	F
5;15	F	4;8	T	5;13	F	4;8	T	4;5	F	5;8	F	6;13	T	6;13	T
6;13	T	5;13	F	6;13	T	5;15	F	6;13	T	7;14	F	7;14	F	7;14	F
7;14	F	6;13	T	7;14	F	6;13	T	7;14	F	9;15	F	9;15	F	9;15	F
9;15:	F	7;14	F	9;15	F	7;14	F	9;15	F	10;12	T	17;22	F	24;23	F
11;12:	F	9;15	F	12;17	F	9;15	F	12;22	F	13;22	F	23;24	F	30;33	F
16;17:	F	10;12	T	19;29	F	10;12	T	23;24	F	19;25	T	25;39	T	18;37	T
		16;35	F	30;33	F	11;20	F	25;39	T	20;31	F	36;41	F	18;38	T
		18;37	T	37;38	F	17;22	F	28;37	F	30;33	F				
		18;38	T			18;37	T	31;35	F						
						25;39	T	38;18	T						
						29;24	F								

count_ 8,00	count_T 2,00	count_ 11,00	count_T 5,00	count_ 10,00	count_T 2,00	count_ 13,00	count_T 5,00	count_ 12,00	count_T 3,00	count_ 10,00	count_T 2,00	count_ 9,00	count_T 2,00	count_ 9,00	count_T 3,00
	count_W 0,00		count_W 0,00		count_W 0,00		count_W 0,00		count_W 0,00		count_W 0,00		count_W 0,00		count_W 0,00
precision 0,25	recall 0,06	precision 0,45	recall 0,15	precision 0,20	recall 0,06	precision 0,38	recall 0,15	precision 0,25	recall 0,09	precision 0,20	recall 0,06	precision 0,22	recall 0,06	precision 0,33	recall 0,09

ground truth T 34,00	ground truth W 0
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Precision_max	0,45	Recall_max	0,15
Precision_min	0,20	Recall_min	0,06
Precision_ave	0,29	Recall_ave	0,09

Answer1		Answer2
8;4	T	3,1 T
8;9	T	6,13 T
3;10	T	13,64 T
6;13	T	8,9 T
64;13	T	8,15 F
6;58	T	8,5 F
58;64	T	5,52 F
24;61	T	8,4 T
23;61	T	8,47 T
53;19	T	37,38 T
53;25	T	37,49 T
45;19	T	18,37 T
25;45	T	18,38 T
18;37	T	18,49 T
18;38	T	50,52 F
18;49	T	19,45 T
37;38	T	19,53 T
37;49	T	25,45 T
		25,53 T
		28,61 F
		44,56 T
		55,56 T
		52,47 T
		52,4 T

count_	count_T	count_	count_T
18,00	18,00	24,00	19,00
	count_W		count_W
	0,00		0,00
precision	recall	precision	recall
1,00	0,53	0,79	0,56

ground truth T	ground truth W
34,00	0

Precision_max	1,00	Recall_max	0,56
Precision_min	0,79	Recall_min	0,53
Precision_ave	0,90	Recall_ave	0,54

63	national values received from the trackside shall be valid only for a limited time, after which they will be automatically deleted from the onboard equipment.	0
61	ETCS shall only provide the driver with information to allow him to drive the train safely if the train speed is below 400 km/h.	0
58	ETCS shall only be compatible with national systems listed in the CCS TSI if those systems are also equipped with ETCS.	0
56	Basic track to train information shall only be provided via radio and not via balises.	0
52	ETCS shall not require the driver to acknowledge any level transitions, even if requested from trackside.	0
43	The ETCS onboard equipment shall automatically switch to the lowest level available on a line, even if it is not equipped for that level.	0
42	ETCS shall not provide any information to the driver during level transitions.	0
37	ETCS shall only be functional up to a maximum train speed of 100 km/h.	0
28	ETCS shall allow for manual speed control by the driver at all times, regardless of the maximum train speed.	0
25	ETCS shall not be able to supervise train or shunting movements.	0
19	ETCS shall not be able to supervise shunting movements.	0
18	ETCS is required to be functional to a maximum train speed of 600 km/h.	0
13	ETCS shall not be compatible with any national systems listed in the CCS TSI.	0
10	ETCS shall not be required to provide any track-to-train or train-to-track information via continuous transmission media, i.e. radio.	0
8	ETCS shall not require any driver input for level transitions.	0
64	ETCS shall be compatible with existing national systems listed in the CCS TSI such that it does not interfere with the national systems and is not interfered with by the national systems.	1
62	During the transition period between two operational states (including two different national operations) the supervision provided shall at least ensure the same protection provided by the least restrictive state.	1
60	The ETCS on-board shall be capable of receiving national values from the trackside to adapt to national requirements	1
59	The current application level shall be indicated on the DMI.	1
57	ETCS active for limited train control function; trackside not fitted with any train control system or fitted with a train control system for which no STM is available onboard.	1

55	Basic track to train information via intermittent transmission media, e.g. balises. This information can be supported by infill, transmitted via balise, loop or radio.	1
54	If the on-board has no valid national values for the current location, default values shall be used by the onboard equipment.	1
53	ETCS shall be able to supervise train and shunting movements.	1
51	Trains equipped for ERTMS/ETCS application level 3 shall be able to run on lines equipped with ERTMS/ETCS application level 3, 2, 1 and 0, trains equipped for ERTMS/ETCS application level 2 shall be able to run on lines equipped with ERTMS/ETCS application level 2, 1 and 0 and trains equipped for ERTMS/ETCS application level 1 shall be able to run on lines equipped with ERTMS/ETCS application level 1 and 0.	1
50	For transitions to and from national Operation (STM) the ETCS shall request, an acknowledgement by the driver.	1
49	ETCS is required to be functional to a maximum train speed of 500 km/h.	1
48	transitions which occur while the train is stationary, shall be initiated automatically or manually as appropriate.	1
47	The driver shall acknowledge the level transitions, if requested from trackside. If the driver does not acknowledge after the transition the brake shall be applied. If the driver acknowledges afterwards, the brake can be released	1
46	If an ETCS equipped train passes a level transition to a line fitted with more than one level, the onboard shall switch to the highest level, according to the priority given by trackside, for which it is equipped.	1
45	ETCS shall be able to supervise train and shunting movements.	1
44	Basic track to train information via intermittent transmission media, e.g. balises. This information can be supported by infill, transmitted via balise, loop or radio.	1
41	Once received onboard the national values shall remain valid even if the onboard equipment is switched off.	1
40	The ETCS on-board shall be capable of receiving national values from the trackside to adapt to national requirements	1
39	national values shall be applicable to a defined area.	1
38	ETCS is required to be functional to a maximum train speed of 500 km/h.	1
36	Once received onboard the national values shall remain valid even if the onboard equipment is switched off.	1

35	Trains equipped for ERTMS/ETCS application level 3 shall be able to run on lines equipped with ERTMS/ETCS application level 3, 2, 1 and 0, trains equipped for ERTMS/ETCS application level 2 shall be able to run on lines equipped with ERTMS/ETCS application level 2, 1 and 0 and trains equipped for ERTMS/ETCS application level 1 shall be able to run on lines equipped with ERTMS/ETCS application level 1 and 0.	1
34	transitions which occur while the train is stationary, shall be initiated automatically or manually as appropriate.	1
33	If an ETCS equipped train passes a level transition to one or more levels for which it is not equipped, ETCS shall initiate a brake application.	1
32	The current operational status shall be indicated to the driver on the DMI	1
31	If an ETCS equipped train passes a level transition to a line fitted with more than one level, the onboard shall switch to the highest level, according to the priority given by trackside, for which it is equipped.	1
30	If an ETCS equipped train passes a level transition to one or more levels for which it is not equipped, ETCS shall initiate a brake application.	1
29	Default values shall be harmonised values, permanently stored in all ERTMS/ETCS on board equipment.	1
27	During the transition period between two operational states (including two different national operations) the supervision provided shall at least ensure the same protection provided by the least restrictive state.	1
26	ETCS active for limited train control function; trackside not fitted with any train control system or fitted with a train control system for which no STM is available onboard.	1
24	Default values shall be harmonised values, permanently stored in all ERTMS/ETCS on board equipment. ETCS shall provide the driver with information to allow him to drive the train safely.	1
23	ETCS shall provide the driver with information to allow him to drive the train safely.	1
22	track to train information provided by national system. Onboard functions provided by national system (STM) in co-operation with onboard ETCS.	1
21	national values shall be applicable to a defined area.	1
20	In case the transition has to be acknowledged and the driver fails to acknowledge as required, the ETCS shall initiate a brake application	1
17	track to train information provided by national system. Onboard functions provided by national system (STM) in co-operation with onboard ETCS.	1

16	If the on-board has no valid national values for the current location, default values shall be used by the onboard equipment.	1
15	If, as a result of an automatic transition, except for transitions to and from national Operation (STM), the responsibility for the driver increases, the ETCS shall seek an acknowledgement from the driver, whether the train is stationary or not.	1
14	Any transition which occurs while the train is moving shall in principle occur automatically.	1
12	Basic track to train and train to track information via continuous transmission media, i.e. radio. The train detection is provided by trackside.	1
11	In case the transition has to be acknowledged and the driver fails to acknowledge as required, the ETCS shall initiate a brake application	1
9	If, as a result of an automatic transition, except for transitions to and from national Operation (STM), the responsibility for the driver increases, the ETCS shall seek an acknowledgement from the driver, whether the train is stationary or not.	1
7	Any transition which occurs while the train is moving shall in principle occur automatically.	1
6	ETCS shall be compatible with existing national systems listed in the CCS TSI such that it does not interfere with the national systems and is not interfered with by the national systems.	1
5	For transitions to and from national Operation (STM) the ETCS shall request, an acknowledgement by the driver.	1
4	The driver shall acknowledge the level transitions, if requested from trackside. If the driver does not acknowledge after the transition the brake shall be applied. If the driver acknowledges afterwards, the brake can be released	1
3	Basic track to train and train to track information via continuous transmission media, i.e. radio. The train detection is provided by trackside.	1
2	The current application level shall be indicated on the DMI.	1
1	The current operational status shall be indicated to the driver on the DMI	1

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count 34