Stage-Based Process Performance Analysis

EVALUATION

Experimental Setting

BPIC15

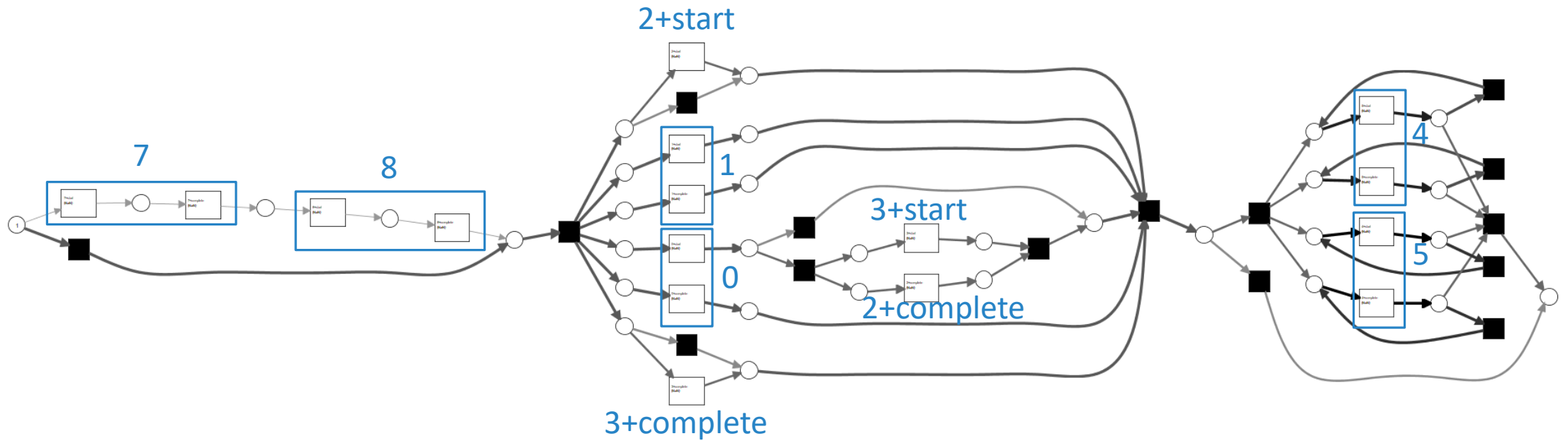| Stage	Start Activities	End Activities
0	register submission date request, date for inspection MER, OLO messaging active	enter senddate acknowledgement, phase application received, start WABO procedure, create procedure confirmation, send confirmation receipt, publish, regular procedure without MER, applicant is stakeholder, enter senddate procedure confirmation, send procedure confirmation, forward to the competent authority, reception through OLO, investigate BAG objects, inform BAG administrator, create publication document
1	create subcases completeness, create publication document, registration date publication, enter senddate procedure confirmation, registrer date of publishing received request, WAW permit aspect, treat subcases completeness	phase application receptive, procedure change, subcases completeness completed, resume completeness subcases, start WABO procedure, regular procedure applies, detailed procedure applies, send procedure confirmation, request complete, procedure change after completeness, MER present in supplement
2	send letter in progress, request complete, enter senddate procedure confirmation, send procedure confirmation, create procedure confirmation	completed subcases content, treat subcases content, create subcases content, phase application receptive, WAW permit aspect
3	procedure change, activities regular procedure, enter senddate procedure confirmation	assessment of content completed, phase advice known, start WABOprocedure, grounds for refusal, updated plan after review, send procedure confirmation

BPIC15

| Stage	Start Activities	End Activities
4	ask stakeholders views, by law, submit draft decision, submit decision, enter date advice on treatment of environmental permit, contacting applicant, create draft environtmental permit, enter senddate party permitted, enter date draft decisionenvironmental permit, dismiss under mandate, set decision status, start decisionphase draft decision - permitting decided, phase concept draft decision ready, decision date prior to decision	phase decision taken, set decision phase decision permitting decided, record date of decision environmental permit, register date environmental permit decision, generating decision environmental permit, generate draft decision environmental permit, phase decision ready, creating environmental permit decision, phase draft decision made
5	register objection and appeal periods, creating cover letter decision, suspend term, enter senddate suspension by competent authority, transcript decision environmental permit to stakeholders, continue or abort mutation BAG objects, create monitoring case	start decision phase decision permitting sent, enter senddate decision environmental permit, phase decision sent, enter senddate decision, set decision phase inspection of decision permitting, set decision phase decision permitting published, enter date publication decision environmental permit, generate publication document decision environmental permit, continuation term to decision, date decision for inspection, create publication document
6	enter senddate continuation	send continuation letter
7	send continuation letter	close case
8	register deadline, mutation BAG carry objects	read publication date field, stop all running subcases 2b, phase case handled, phase archived case, close case

BPIC20

Stage	Start Activities	End Activities
Apply	Permit SUBMITTED by EMPLOYEE	Permit REJECTED by ADMINISTRATION, Permit REJECTED by BUDGET OWNER, Permit REJECTED by SUPERVISOR, Permit REJECTED by DIRECTOR, Permit FINAL_APPROVED by SUPERVISOR, Permit FINAL_APPROVED by DIRECTOR
Claim	Request For Payment SUBMITTED by EMPLOYEE	Request For Payment REJECTED by BUDGET OWNER, Request For Payment REJECTED by SUPERVISOR, Payment Handled
Travel	Start trip	End trip
Declare	Declaration SUBMITTED by EMPLOYEE	Declaration REJECTED by ADMINISTRATION, Declaration REJECTED by BUDGET OWNER, Declaration REJECTED by SUPERVISOR, Declaration REJECTED by DIRECTOR, Payment Handled

Event Abstraction
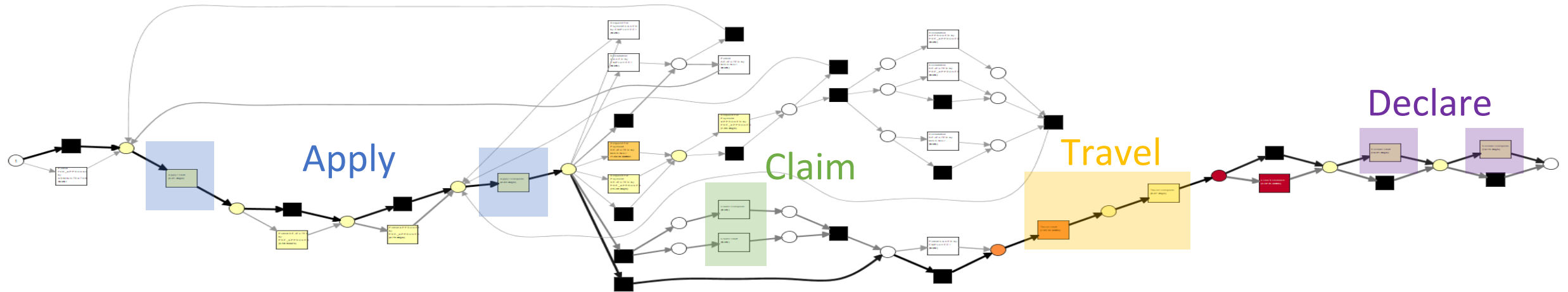
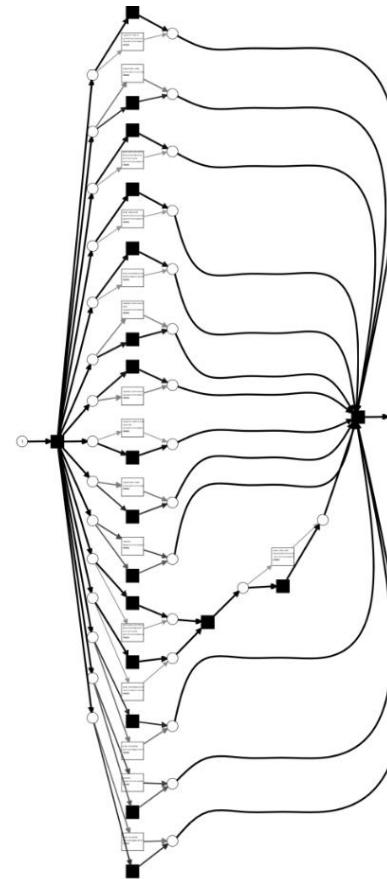# Abstraction – CRF – BPIC 20
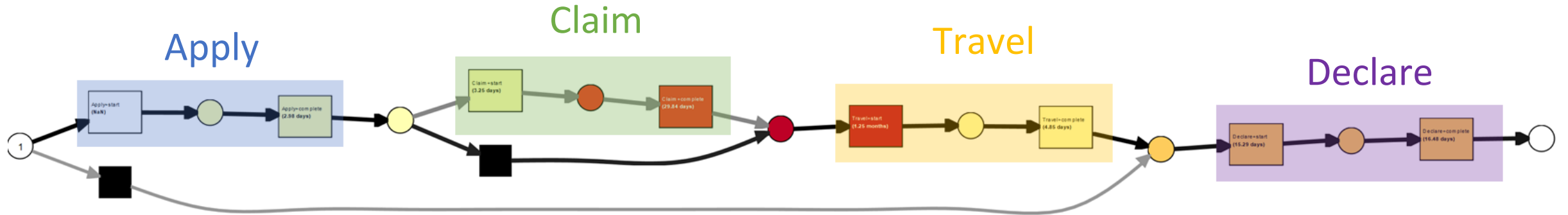
Abstraction – PNP – BPIC 15

UNAVAILABLE

Abstraction – PNP – BPIC 20

Apply

Claim

Travel

Declare

Abstraction – SESS – BPIC 15

Abstraction – SESS – BPIC 20

Abstraction – SM – BPIC 15

UNAVAILABLE

Abstraction – SM – BPIC 20

UNAVAILABLE

Abstraction – PE – BPIC 20

Performance Visualization

Visualization – PV – BPIC 15

Visualization – PV – BPIC 15

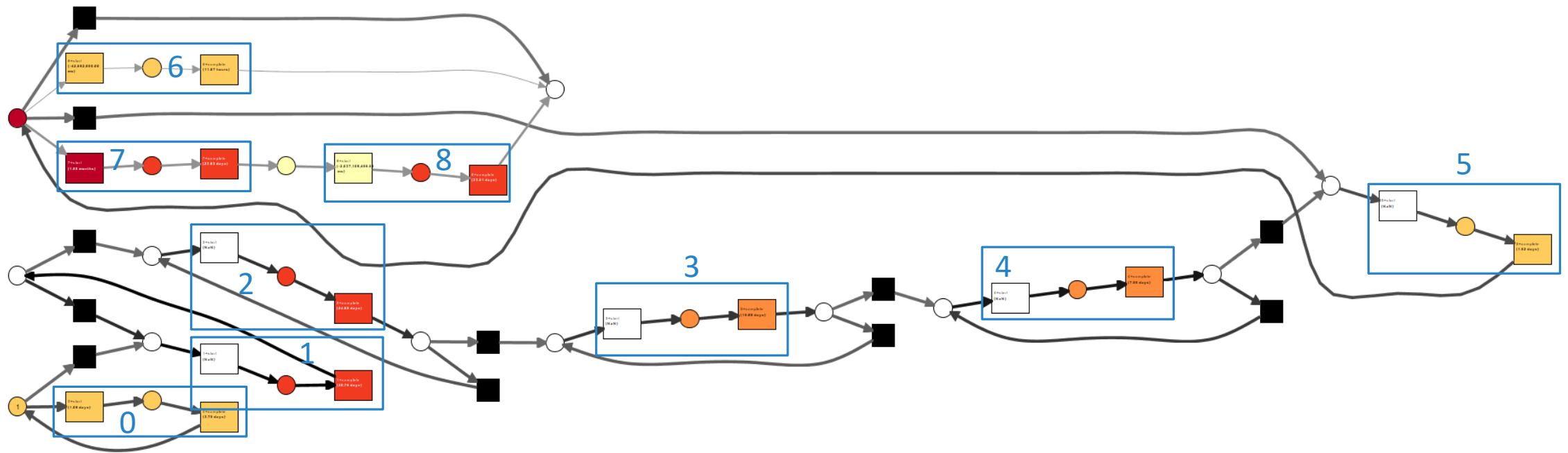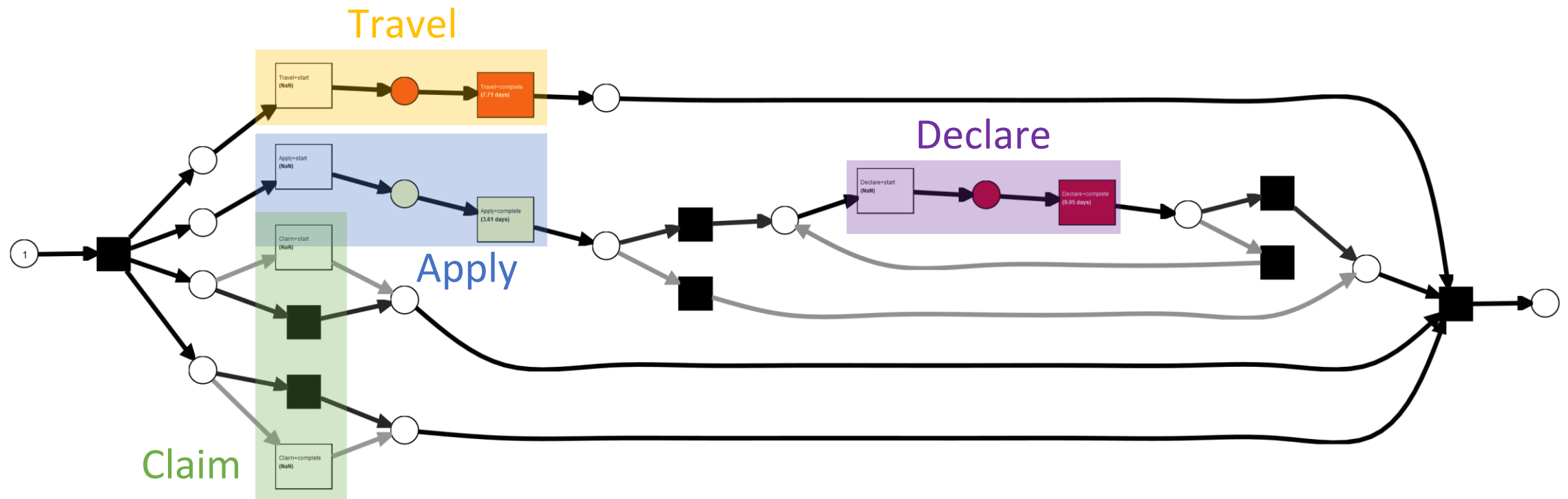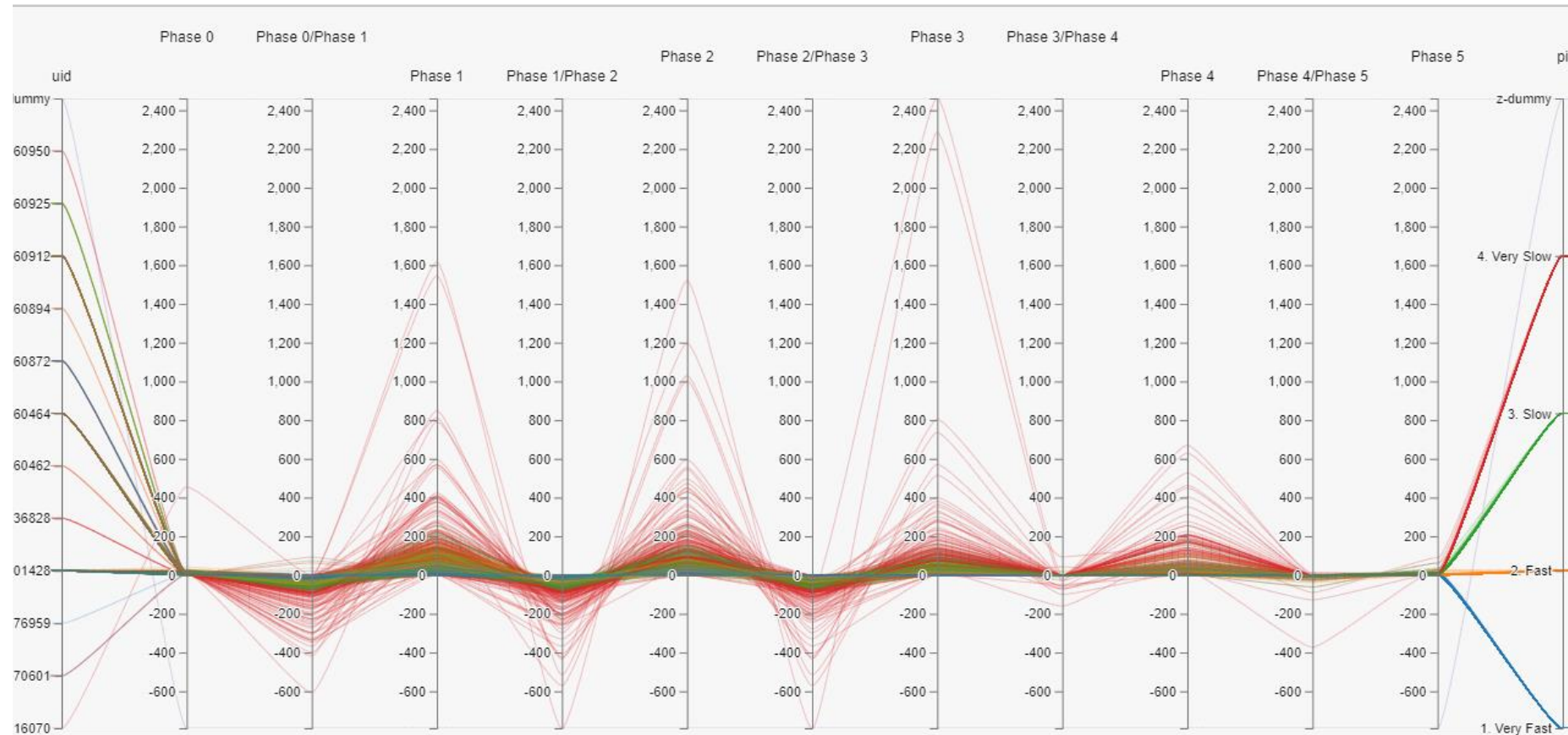|	Phase 0	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
FT-Sum	52196 days 22:44:39	53690 days 11:50:40	48498 days 20:30:52	41468 days 05:35:36	15645 days 04:57:40	8786 days 05:47:24	0 days 11:52:04	3288 days 02:39:29	3427 days 19:00:58
FT-Minimum	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 11:52:04	0 days 00:00:00	0 days 00:00:00
FT-Maximum	1020 days 00:00:00	1096 days 00:00:00	791 days 00:10:15	1096 days 00:00:00	378 days 00:00:00	842 days 07:34:01	0 days 11:52:04	295 days 11:21:46	295 days 11:21:46
FT-Median	22 days 00:00:00	31 days 00:00:00	34 days 15:46:41	18 days 11:53:30	5 days 00:00:00	7 days 09:15:23	0 days 11:52:04	10 days 11:29:26	10 days 00:00:00
FT-Average	43 days 12:48:35	47 days 23:32:19	50 days 01:12:36	40 days 08:07:48	16 days 21:55:47	9 days 18:33:37	0 days 11:52:04	23 days 19:50:43	22 days 09:41:34
FT-S.D.	76 days 02:08:14	77 days 14:09:20	70 days 22:09:21	83 days 23:48:34	37 days 13:27:57	33 days 06:41:38	0 days 00:00:00	39 days 22:46:24	38 days 11:13:37
FT-Count	1199	1119	969	1028	925	899	1	138	153
CT-Sum	7461 days 04:39:44	82340 days 06:11:00	67222 days 02:24:05	40890 days 16:30:30	25697 days 12:31:26	3129 days 01:42:38	0 days 11:52:04	3288 days 02:39:29	3407 days 06:50:47
CT-Minimum	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 00:00:00	0 days 11:52:04	0 days 00:00:00	0 days 00:00:00
CT-Maximum	454 days 01:00:00	1096 days 00:00:00	759 days 17:02:47	1096 days 00:00:00	334 days 13:31:44	747 days 07:34:01	0 days 11:52:04	295 days 11:21:46	295 days 11:21:46
CT-Median	1 days 16:13:41	0 days 00:04:52	0 days 00:52:33	0 days 00:00:10	0 days 00:00:01	0 days 00:00:04	0 days 11:52:04	10 days 11:29:26	10 days 00:00:00
CT-Average	3 days 17:53:38	20 days 18:09:05	24 days 15:36:49	15 days 21:24:48	7 days 13:33:16	1 days 12:33:42	0 days 11:52:04	23 days 19:50:43	21 days 20:11:52
CT-S.D.	12 days 09:45:04	53 days 00:35:27	55 days 20:11:19	63 days 07:00:49	25 days 04:48:00	17 days 13:55:14	0 days 00:00:00	39 days 22:46:24	38 days 06:15:59
CT-Count	1992	3967	2727	2573	3397	2054	1	138	156

Visualization – PV – BPIC 20
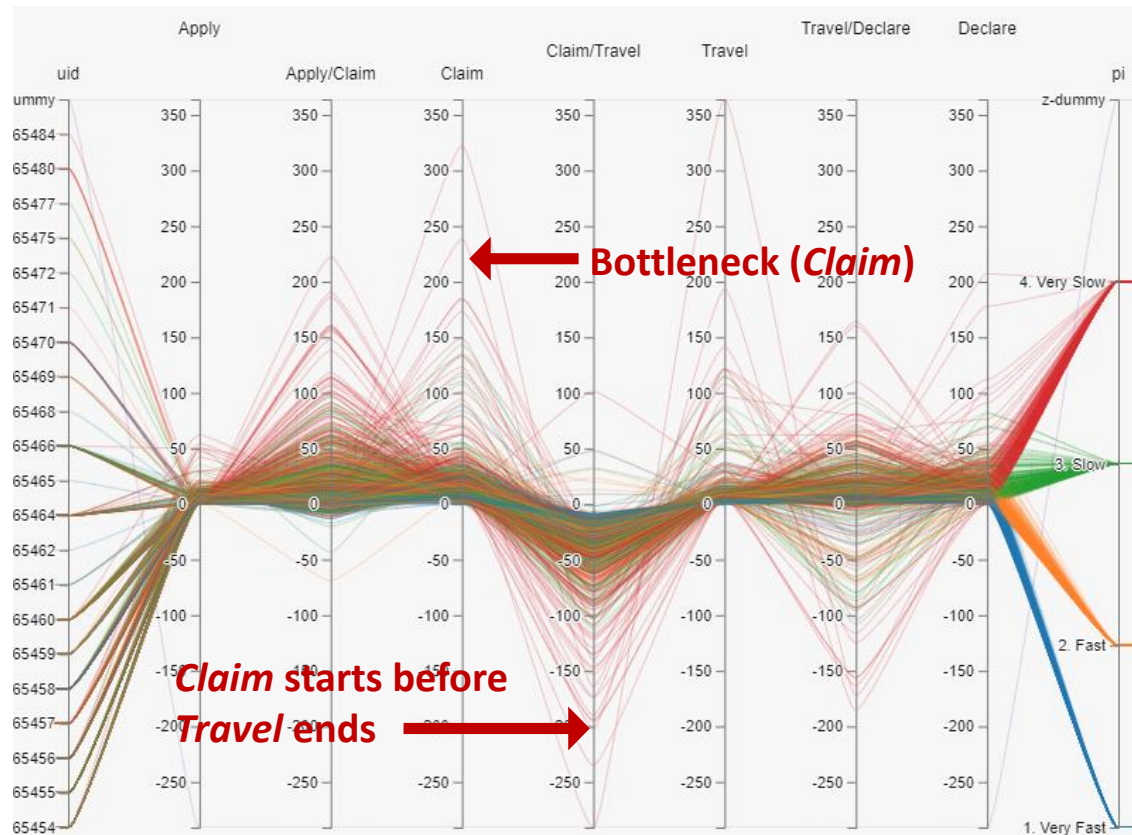
	Apply	Claim	Travel	Declare
FT-Sum	28762 days 20:39:48	92302 days 12:04:24	54477 days 11:00:00	90339 days 09:02:08
FT-Minimum	0 days 00:00:01	0 days 00:00:50	0 days 00:00:00	0 days 00:00:03
FT-Maximum	263 days 21:33:09	314 days 07:06:04	1102 days 00:00:00	455 days 05:40:06
FT-Median	1 days 20:41:16	66 days 02:19:54	4 days 00:00:00	10 days 07:51:44
FT-Average	4 days 02:01:38	70 days 05:53:26	7 days 17:03:41	16 days 05:19:26
FT-S.D.	9 days 11:15:56	45 days 19:49:45	28 days 09:15:06	22 days 10:09:51
FT-Count	7042	1314	7065	5569
CT-Sum	25889 days 00:27:42	19979 days 06:21:56	54477 days 11:00:00	73348 days 12:34:30
CT-Minimum	0 days 00:00:01	0 days 00:00:02	0 days 00:00:00	0 days 00:00:01
CT-Maximum	263 days 21:33:09	170 days 21:42:44	1102 days 00:00:00	429 days 02:42:28
CT-Median	1 days 16:55:03	7 days 06:24:00	4 days 00:00:00	7 days 04:36:51
CT-Average	3 days 13:10:23	9 days 20:40:28	7 days 17:03:41	9 days 21:51:18
CT-S.D.	7 days 14:27:03	12 days 07:46:11	28 days 09:15:06	14 days 09:53:38
CT-Count	7295	2026	7065	7401

Visualization – PSM – BPIC 15

Visualization – PSM – BPIC 20
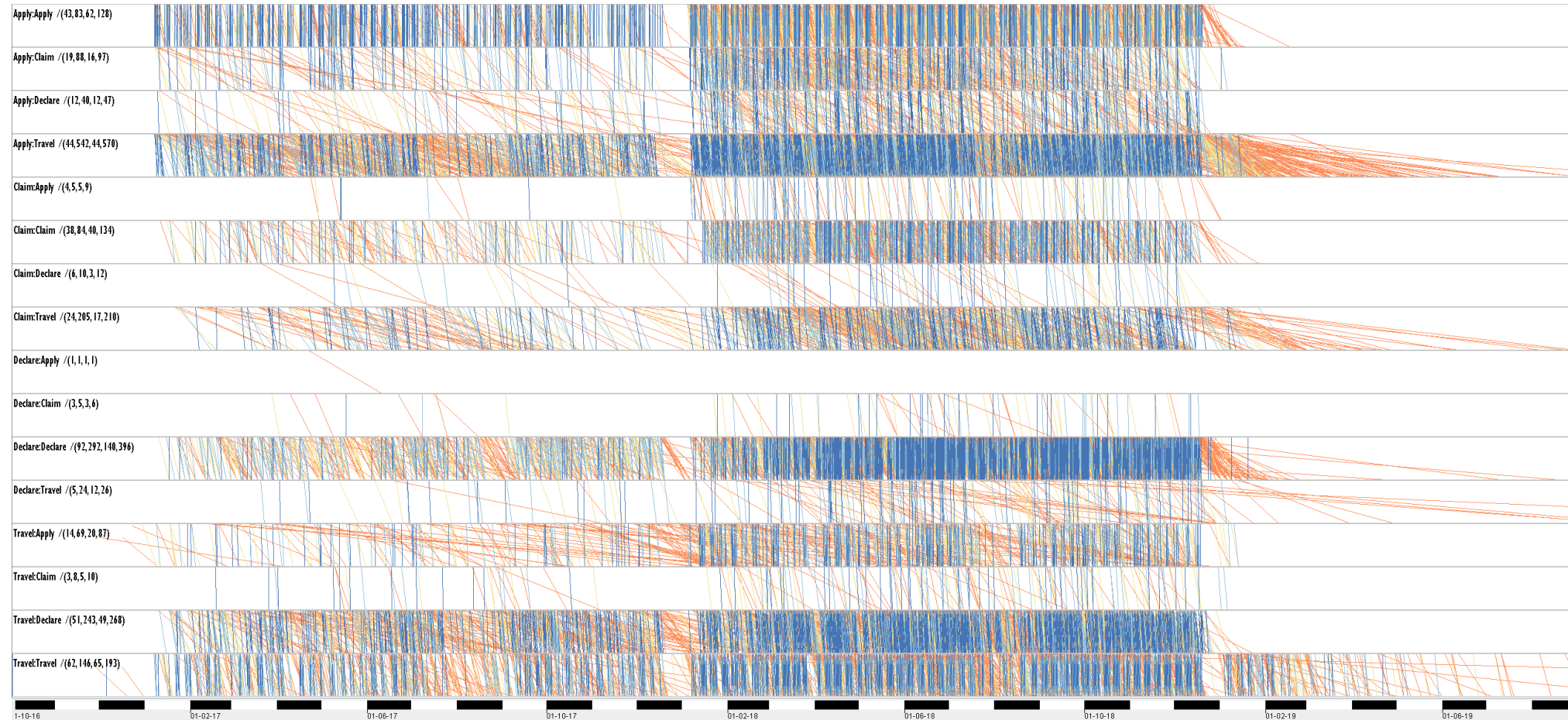
Visualization – SPF – BPIC 15

UNAVAILABLE

Visualization – SPF – BPIC 20

Staged Process Flow

Legend: claim-Complete, claim-Exit, claim-Service, claim-Queue, declare-Exit, declare-Service, declare-Queue, travel-Exit, travel-Service, travel-Queue, apply-Exit, apply-Service, apply-Queue

From Mon, 9 Jan 2017 10:28:04 +0100 To Tue, 31 Aug 2021 23:28:04 +0200 (1695 days) (Mean/Median)

	AR(cases/day)	DR(cases/day)	ER(cases/day)	CIP(cases)	TIS(hours)	FE(%)
System	2.55 / 0.00	0.00 / 0.00	0.00 / 0.00	3195.53 / 4314.00	69859.41 / 47359.00	--
apply-queue	2.55 / 0.00	2.55 / 0.00		0.11 / 0.00	6796.48 / 3160.00	
apply-service	2.55 / 0.00	2.55 / 0.00	0.00 / 0.00	8.49 / 0.00	6824.72 / 3160.00	--
travel-queue	2.55 / 0.00	2.55 / 0.00		88.96 / 16.00	6526.99 / 2844.00	
travel-service	2.55 / 0.00	2.55 / 0.00	0.00 / 0.00	14.01 / 4.00	3946.32 / 408.00	--
declare-queue	2.55 / 0.00	1.93 / 0.00		734.02 / 1025.00	8502.79 / 5189.00	
declare-service	1.93 / 0.00	1.93 / 0.00	0.00 / 0.00	26.69 / 1.00	6883.18 / 3131.00	--
claim-queue	1.93 / 0.00	0.00 / 0.00		2323.23 / 3268.00	20013.77 / 19834.00	
claim-service	0.00 / 0.00	0.00 / 0.00	0.00 / 0.00	0.02 / 0.00	10365.17 / 9633.00	--