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| 1 | Notes | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | Quick Expected Value is a "quick and dirty" way of approximating the mean of an individual risk. | | | | | | | | | |
| 4 | Adding up the QEVs of all risks should roughly equate to the Total Mean output of the simulation. It is | | | | | | | | | |
| 5 | possible to simulate the means of each risk with the sum of the simulated means approximating more | | | | | | | | | |
| 6 | closely to the Total Mean output. However, this simulation is too cumbersome for normal PCs to run | | | | | | | | | |
| 7 | in a reasonable time. | | | | | | | | | |
| 8 | The spreadsheet has been used to calculate the Quick Expected Value of each risk and this has been | | | | | | | | | |
| 9 | summed in order to allow calculation of the % allocation of risk as follows:- | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | $\left(\frac{QEVI\text{ndivid} ualRisk}{\sum QEVI\text{ndivid} ualRisks} \right) * 100\% = \%RiskAlloca\ textit{tion}$ | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | The % allocation of risk has then been applied to the total simulation output at P90 level in order to | | | | | | | | | |
| 15 | provide a "P90 value" for individual risks and consequently, each risk grouping. The equation for | | | | | | | | | |
| 16 | obtaining the "P90 value" is as follows:- | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | $\%RiskAlloca\ textit{tion} * TotalSimul\ textit{ation}Output\ textit{at}P90 = RiskValueA\ llocated$ | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | The calculation has been done in this manner because, in a similar manner to the averaging of | | | | | | | | | |
| 21 | averages, the simulated P90 outputs of individual risks or risk groupings will not add up to the | | | | | | | | | |
| 22 | simulated P90 Output. | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | |
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| EDINBURGH TRAM NETWORK Master | | | | | | | | | | | | | | |
| Pareto Risk Register for Project 1A Only | | | | | | | | | | | | | | |
| RISK ID | | RISK DESCRIPTION | | | VALUE | | | TREATMENT | | | | | | |
| Risk ID | Key Element Impacted | Cause | Risk Event | Effect | % Risk Allocation by Quick Expected Value | Quick Expected Value (Mean) | Allocation Value (% Allocation Total PBI) | Treatment Strategy | Comments | | | | | |
| 139 | Utilities Diversions (MUDFA) | Utilities diversion outline specification only from plans | Uncertainty of Utilities location and consequently required diversion work/unforeseen utility services | Increase in MUDFA costs or delays as a result of carrying out more diversions than estimated | 13.794% | 4,300,500 | 5,917,708 | 1. Review design information and re-measure during design workshops with Utilities Companies and MUDFA. 2. Develop PC sums into quantified estimates. 3. In conjunction with MUDFA, undertake trial excavations to confirm locations of utilities. 4. Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales. | | | | | | |
| 343 | Inflation | General delay to programme with various causes e.g. failure to obtain approvals on time; parliamentary processes; delays due to slack of prioritisation of BAA agreement with new owners | Delay to completion | Inflation at 5% causes increased out-turn cost due to delay | 7.829% | 2,440,867 | 3,358,757 | See mitigations for underlying delay risks | This is a general delay risk that reflects the financial impact of inflation due to delay. Risk is treated through other activities. | | | | | |
| 352 | Land & Property | Some properties may result in higher land compensation claims than anticipated | Land compensation for high risk properties | Additional uplift on compensation claims | 7.377% | 2,300,000 | 3,164,918 | 1. Initiate early negotiations between DV and landowners. 2. Liaise with CEC Planning. | | | | | | |
| 214 | Infrastructure (InfraCo) | Scope of Network Rail infrastructure alteration is not yet defined | Network Rail infrastructure requirements are not met during design | Re-work and consequent delay to programme, increase in cost over and above base estimate | 5.132% | 1,600,000 | 2,201,682 | Risk owned by Jeff Lloyd. Treatment plan not yet entered into ARM. | | | | | | |
| 172 | Infrastructure (InfraCo) | Area of possible contamination (unlicensed tip) has been highlighted during desk study immediately to west of Gogar Burn - investigation for CERT project indicates that this consists of building rubble and domestic waste. | Tramway runs through area of possible contamination and special foundation is required to cope with "unstable" ground | Increase in costs to provide special foundation solution | 4.330% | 1,350,000 | 1,857,669 | 1. Obtain ground investigation information, design accordingly and include costs in base estimate. DETAILED SI REPORT AVAILABLE W/E 9 FEBRUARY - DESIGN AND ASSESSMENTS WILL BE AVAILABLE AFTER PUBLICATION. 2. Include SI Report and information in next issue of information to Infraco | | | | | | |
| 348 | Project Management | Project not completed to programme due to employee controlled issues. | Project end date extended. | Project Management and overhead costs to cover delay. | 3.464% | 1,080,000 | 1,486,135 | 1. Implement controls. 2. Review Infraco bids. 3. Undertake opportunity reviews. 4. Deliver MUDFA to time. | | | | | | |
| 48 | Infrastructure (InfraCo) | Two stage tender pricing does not achieve price certainty for works at first stage. | Price certainty is not achieved | Price creep post tender (during pre-construction period). Tender evaluation period exceeds 2 months currently planned. Bidder may attempt to price low at first stage. | 3.169% | 988,000 | 1,359,539 | Cost checking of detailed designs and applying value engineering where major divergences emerge | High level treatment plan reflecting that this is a general delay risk to reflect the cost impact of project management if there is a delay. True solution found with other treatment plans and project management methods. | | | | | |
| 164 | Utilities Diversions (MUDFA) | Assets uncovered during construction that were not previously accounted for | Unknown and abandoned assets affect scope of MUDFA and/or Infraco work | Re-design and delay as investigation takes place and solution implemented | 3.079% | 960,000 | 1,321,009 | See Risk 139 - treatment plans linked. | | | | | | |
| 135 | Infrastructure (InfraCo) | Electrical interference caused by proximity to existing Network Rail routes | Network Rail Immunisation has not been included in base estimate or requirements are over and above what has been included for | Increased design and construction requirements to ensure interference does not occur | 2.887% | 900,000 | 1,238,446 | Apply Immunisation | | | | | | |
| 360 | Land & Property | Landowner disagrees with District Valuer's Assessment of land value and submits a Certificate of Appropriate Alternative Development - Plot 162 | Submission of CAAD Claim | Increase in land value for plot | 2.847% | 887,500 | 1,221,245 | TBA | | | | | | |
| 44 | Project Management | SDS contractor does not deliver the required consents before novation | Late prior consents | Delay to programme with additional resource costs | 2.598% | 810,000 | 1,114,601 | Project to actively facilitate delivery of consents | | | | | | |
| 70 | Project Management | SDS does not provide its defined deliverables (technical specs) in accordance with the SDS contract | Poor definition in tender spec | Creates impact on the Infraco ability to develop its tender - pricing and supply chain. Increase in time for BAFO and increase in costs | 2.598% | 810,000 | 1,114,601 | See SDS Recovery Strategy Response Item 4 | | | | | | |
| 359 | Land & Property | Landowner disagrees with District Valuer's Assessment of land value and submits a Certificate of Appropriate Alternative Development - Plot 150 | Submission of CAAD Claim | Increase in land value for plot | 2.598% | 810,000 | 1,114,601 | TBA | | | | | | |
| 47 | Infrastructure (InfraCo) | Late utility diversion works within carriageway in advance of Infraco works; MUDFA poor performance. | Late design, late approvals and other matters outside MUDFA control; MUDFA is late. | Increase in price and time delay in the Infraco contract. Infraco could end up delay to commencement or with utility diversion and would have to price for or have to carry out unplanned re- | 2.575% | 802,750 | 1,104,625 | TBA | | | | | | |
| 178 | Infrastructure (InfraCo) | Procurement Strategy novates SDS to Infraco after Detailed Design | Limited input on buildability from Infraco | Design re-work at outset will result in higher bids | 2.502% | 780,000 | 1,073,320 | TBA | | | | | | |
| 354 | Land & Property | Land and property values experience a net reduction in value as a result of the introduction of the Tram | Part 1 Claims for land and property | Possible successful claims resulting in increased costs to project with impact after construction | 2.249% | 701,250 | 964,956 | TBA | | | | | | |

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|----|-----|-------------------------------|---|--|---|--------|---------|---------|--|---|---|---|---|
| 21 | 66 | Infrastructure (InfraCo) | Contracts not integrated | Inadequate system integration | Time delay and interface problems between specialist contractors' sub systems | 1.871% | 583,333 | 802,697 | Contract alignment exercise due to be completed before return of Consolidated Proposals will mitigate this risk | | | | |
| 22 | 81 | Infrastructure (InfraCo) | Insufficient time to develop complete tender designs | Inadequate design development for tender stage. | Infraco may price for additional reworking of design for compliant or variant proposals | 1.783% | 555,750 | 764,740 | Plan being agreed with Infraco bidders to prioritise release of detailed design information at an appropriate level for pricing | | | | |
| 23 | 342 | Infrastructure (InfraCo) | Two data cable nests co-incide with Tram alignment at Gogar | BT Gogar data cable nest diversion | Long lead and construction times | 1.604% | 500,000 | 688,026 | Site surveys being undertaken | | | | |
| 24 | 154 | Tram Vehicles (TramCo) | Increase in specification over and above assumptions in base estimate regarding equipment and quality specification for tram vehicles | Business case runtime and CEC requirements (change in equipment and quality specification) | Increased cost of tramsets | 1.588% | 495,000 | 681,145 | Tendered costs within estimate allowance | | | | |
| 25 | 102 | Design (SDS) | Change in Design Kinematic Envelope requirements | Detail design leads to kinematic envelope impact on vertical and horizontal alignment | Realignment of track to accommodate an increased 3 dimensional safe zone around the preferred route | 1.403% | 437,500 | 602,022 | TBA | | | | |
| 26 | 11 | Land & Property | Contractors' methodology not adequately assessed | Land required for access to workfront not acquired | Additional management and acquisition costs relating to acquiring land to gain access | 1.283% | 400,000 | 550,420 | Ensure that details of Infraco bidders additional land requirements are obtained prior to selection of preferred bidder and that bidder or tie have clear plans to acquire additional land prior to commencement of work | | | | |
| 27 | 21 | Utilities Diversions (BU/DFE) | Diversion/ relocation of utilities requires to be outside of LoD | Diversion of utilities outside of LoD | Additional disruption and costs | 1.260% | 392,667 | 540,329 | TBA | | | | |
| 28 | | | | | | | | | | | | | |

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|----|--|------------------------------|---|--|--|--|------------------------------------|---|
| 1 | EDINBURGH TRAM NETWORK Master | | | | | | | |
| 2 | Black Risk Register for Project 1A Only | | | | | | | |
| 3 | RISK ID | | RISK DESCRIPTION | | | TREATMENT | | |
| 4 | Risk ID | Key Contract Impacted | Cause | Risk Event | Effect | Treatment Strategy | Comments | |
| 5 | 282 | Infrastructure (InfraCo) | Procurement has high level of risk transfer to contractors | Failure to sustain suitable interest from the market throughout the bid process | Increased price of bids; Withdrawal of bidders during bid process | 1. Identify feasible alternatives to risk allocation and allow negotiation of risk allocation. | | |
| 6 | 281 | Project Management | | Insufficient planing of procurements and controls on management and contract costs | Weak procurement plan; scope/cost creep; damage to reputation | 1. Improve robustness of procurement plan. 2. Finalise project estimate and functional specification and apply change control. 3. Undertaken further Value Engineering. | | |
| 7 | 274 | Project Management | | Failure to engage with Transdev in order to amend DPOFA in line with the development of the Infraco and Tramco procurements. This includes negotiation to secure Transdev acceptance of a subcontract to support system commissioning and responsibilities | Failure to achieve most effect commercial solution; Delay in resolutions of Agreements | 1. Engage with Transdev to ensure adjustments to DPOFA and negotiate requirements. | Sub Impact Category: DPOFA | |
| 8 | 268 | Project Management | Business case is not approved or is approved subject to the gaining of additional funding | Funding not secured or agreements not finalised regarding the total aggregate funding including £45m CEC contribution; developer contributions; cashflow/funding profile; financial covenant; and public sector risk allocation e.g. inflation | Possible showstopper; Delays and increase in out-turn cost may affect affordability. | 1. Acquire confidence in contingency figures. 2. Develop and implement strategy for additional contributions. 3. Ensure close and continual interactions with TS and CEC to establish funding delivery confidence and agreement. | Sub Impact Category: Business Case | |
| 9 | 269 | Project Management | Doubts over costs and staying within budget, political issues relating to where responsibility should lay. | Agreement on financial over-run risks sharing has not been reached between CEC and TS due to doubts over costs staying in budget. | Potential showstopper to project if agreement not reached. | 1. Facilitate agreement between CEC and TS. 2. Hold discussions with CEC and TS to ensure adequate release of funds at appropriate periods of time. 3. Understand commitments by TS and CEC regarding Phase 1A and 1B. | Sub Impact Category: Business Case | |
| 10 | 273 | Project Management | | Business case is not approved during February 2007 due to Infraco tender returns not adequately informing business case. | Delay until Summer 2007 due to lack of political commitment due to impending elections; Resultant cost impacts (inflation) on total cost; political support may evaporate; Leads to Risk 264. | 1. Manage expectations on the part of TS and CEC as to the certainty with respect to cost which are reflected in the business case. 2. Ongoing fortnightly reviews with bidders and mid term contractual mark up to inform above treatment. 3. Maintain procurement programme to deliver critical business case inputs. | Sub Impact Category: Business Case | |
| 11 | 264 | Project | Political support is lost or political opposition to scheme increases due to lack/loss of confidence in business case (Infraco Costs). Failure to provide information, election campaigning etc | Political risk to continued commitment of TS/CEC support for Tram scheme | Reversal of decisions by incoming administrations in either or both CEC and Holyrood. Project becomes key political issue during election campaign; Protract decision making and unnecessary debate during consideration of business case. | 1. Regular briefings and discussions with senior CEC and TS officers particularly in relation to Full Council presentations. 2. Monitor likely outcomes and do our best to brief all relevant parties about the project in a balanced way. 3. Hearts and Minds campaign including Senior Executive Officer meetings with Councillors and MSPs and utilising the tram sounding board meeting with CEC and selected elected transport leads. 4. Provide confidence on Infraco costs in Business Case ensuring that 70% costs are firm. 5. Make contact and engage with Senior SNP Leaders to address the effect of the project becoming a key political issue during election campaigning. 6. Continue to provide accurate information on status of project to address the effect that the incoming administration after the May 07 elections may reverse decision to proceed. | | |
| 12 | 279 | Infrastructure (InfraCo) | | Third party consents including Network Rail, CEC Planning, CEC Roads Department, Historic Scotland, Building Fixing owner consent is denied or delayed. | Delay to programme. Risk transfer response by bidders is to return risk to tie. Increased out-turn cost if transferred and also as a result of any delay due to inflation. | 1. Engagement with third parties to discuss and obtain prior approvals to traffic management plans, landscape and habitat plans, TTROs. TROs and construction methodologies in relation to archaeological and ancient monuments. 2. Identify fallback options. 3. CEC Planning - Mock application by SDS. | | |

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| 13 | | 187 | Project Management | Poor relationships with stakeholders including political, Network Rail and other major organisations, businesses, frontages, special interest groups (including Spokes, SHN etc), Equalities Transport (DDA), media, community councils and residents associations | Project loses political and public support | Loss of funding support, delays due to protests | 1. Seek support from pro-tram lobby groups to promote positive views 2. Continue with Hearts and Minds Campaign 3. Regular involvement with stakeholders to keep them informed and to better understand their concerns 4. Develop strategies to counteract any negative comments. | | |

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| 1 | EDINBURGH TRAM | | | | | | | | | |
| 2 | Other Risk Register for Project 1A Only | | | | | | | | | |
| 3 | RISK ID | | RISK DESCRIPTION | | | | TREATMENT | | | |
| 4 | Risk ID | Key Contract Impacted | Cause | Risk Event | Effect | Value | Treatment Strategy | Comments | | |
| 5 | Contingenci | | | | | | | | | |
| 6 | O1 | | Unanticipated costs arising out of the detailing of the scheme | Design Development between Initial Proposal and completion of detailed design | Increase in construction cost | 24m | Cost checking of emerging detailed designs and applying value engineering to any variances with allowance | 24m is a contingency allowance which equates to 7% of Infraco cost. This is adequate for this stage of the tendering and design process | | |
| 7 | Contractual Negotiation Risks | | | | | | | | | |
| 8 | O2 | | | General negotiation risk | Leverage in negotiations lost | | Keep two bidders in competition for as long as possible. Settle all major contractual issues prior to return of Consolidated Proposals | See Item 3 in Response also | | |
| 9 | O3 | | | Capped contract liabilities | | | To get the best position at optimum value from negotiating contract terms. Infraco to speculate overhead and profit margin against their failure and that of Tramco and SDS once novated. Termination provision to be added into the contract in the event that caps are or are forecast to be breached | See Item 3 in Response also | | |
| 10 | O4 | | Infraco will not accept SDS as designer | Failure to novate SDS | Potential failure to transfer design and performance risk | | To get the best position at optimum value from negotiating contract terms. To put Project in minimum risk position ensure that detailed design of price and risk critical items is completed and accepted by Infraco prior to Financial Close. As a fallback ensure that Infraco takes responsibility for the system performance and detailed designs even if they do not wish to continue with designer. | See Item 3 in Response also | | |
| 11 | O5 | | | Exclusion of liability for obtaining consents and approvals e.g. prior approvals and TRO | Potential delay and additional costs if not obtained in time | | To obtain critical consents prior to Financial Close or to have clear and agreed plan with authorities giving consents to gain consents by the required dates | See Item 3 in Response also | | |
| 12 | O6 | | | Transport Scotland and CEC indemnities on payment not provided | Bidders walk away | | Transport Scotland to provide indemnities sought or an equivalent arrangement. | See Item 3 in Response also | | |
| 13 | | | | | | | | | | |
| 14 | Programme | | | | | | | | | |
| 15 | O7 | | | Current Programme completion dates not met | | | Apply Value Engineering savings to create programme contingency within current forecast delivery into revenue service dates. | Financial allowance included within Quantified Risks. See also Item 2 in Response | | |
| 16 | | | | | | | | | | |
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| 1 | EDINBURGH TRAM PROJECT | | | | |
| 2 | Risk Simulation Phase 1A Only | | | | |
| 3 | 12-Feb-07 | | | | |
| 4 | | | | | |
| 5 | Distribution for Cost @RISK / Overall | | | | |
| 6 | Contingency/BT368 | | | | |
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| 23 | | | | | |
| 24 | Summary | | | | |
| 25 | P50 | £32.3m | Rounded Up | | |
| 26 | P90 | £42.9m | Rounded Up | | |
| 27 | [Random Seed 1958267957] | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|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| 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1090 | 1091 | 1092 | 1093 | 1094 | 1095 | 1096 | 1097 | 1098 | 1099 | 1100 | 1101 | 1102 | 1103 | 1104 | 1105 | 1106 | 1107 | 1108 | 1109 | 1110 | 1111 | 1112 | 1113 | 1114 | 1115 | 1116 | 1117 | 1118 | 1119 | 1120 | 1121 | 1122 | 1123 | 1124 | 1125 | 1126 | 1127 | 1128 | 1129 | 1130 | 1131 | 1132 | 1133 | 1134 | 1135 | 1136 | 1137 | 1138 | 1139 | 1140 | 1141 | 1142 | 1143 | 1144 | 1145 | 1146 | 1147 | 1148 | 1149 | 1150 | 1151 | 1152 | 1153 | 1154 | 1155 | 1156 | 1157 | 1158 | 1159 | 1160 | 1161 | 1162 | 1163 | 1164 | 1165 | 1166 | 1167 | 1168 | 1169 | 1170 | 1171 | 1172 | 1173 | 1174 | 1175 | 1176 | 1177 | 1178 | 1179 | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 | 1186 | 1187 | 1188 | 1189 | 1190 | 1191 | 1192 | 1193 | 1194 | 1195 | 1196 | 1197 | 1198 | 1199 | 1200 | 1201 | 1202 | 1203 | 1204 | 1205 | 1206 | 1207 | 1208 | 1209 | 1210 | 1211 | 1212 | 1213 | 1214 | 1215 | 1216 | 1217 | 1218 | 1219 | 1220 | 1221 | 1222 | 1223 | 1224 | 1225 | 1226 | 1227 | 1228 | 1229 | 1230 | 1231 | 1232 | 1233 | 1234 | 1235 | 1236 | 1237 | 1238 | 1239 | 1240 | 1241 | 1242 | 1243 | 1244 | 1245 | 1246 | 1247 | 1248 | 1249 | 1250 | 1251 | 1252 | 1253 | 1254 | 1255 | 1256 | 1257 | 1258 | 1259 | 1260 | 1261 | 1262 | 1263 | 1264 | 1265 | 1266 | 1267 | 1268 | 1269 | 1270 | 1271 | 1272 | 1273 | 1274 | 1275 | 1276 | 1277 | 1278 | 1279 | 1280 | 1281 | 1282 | 1283 | 1284 | 1285 | 1286 | 1287 | 1288 | 1289 | 1290 | 1291 | 1292 | 1293 | 1294 | 1295 | 1296 | 1297 | 1298 | 1299 | 1300 | 1301 | 1302 | 1303 | 1304 | 1305 | 1306 | 1307 | 1308 | 1309 | 1310 | 1311 | 1312 | 1313 | 1314 | 1315 | 1316 | 1317 | 1318 | 1319 | 1320 | 1321 | 1322 | 1323 | 1324 | 1325 | 1326 | 1327 | 1328 | 1329 | 1330 | 1331 | 1332 | 1333 | 1334 | 1335 | 1336 | 1337 | 1338 | 1339 | 1340 | 1341 | 1342 | 1343 | 1344 | 1345 | 1346 | 1347 | 1348 | 1349 | 1350 | 1351 | 1352 | 1353 | 1354 | 1355 | 1356 | 1357 | 1358 | 1359 | 1360 | 1361 | 1362 | 1363 | 1364 | 1365 | 1366 | 1367 | 1368 | 1369 | 1370 | 1371 | 1372 | 1373 | 1374 | 1375 | 1376 | 1377 | 1378 | 1379 | 1380 | 1381 | 1382 | 1383 | 1384 | 1385 | 1386 | 1387 | 1388 | 1389 | 1390 | 1391 | 1392 | 1393 | 1394 | 1395 | 1396 | 1397 | 1398 | 1399 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1413 | 1414 | 1415 | 1416 | 1417 | 1418 | 1419 | 1420 | 1421 | 1422 | 1423 | 1424 | 1425 | 1426 | 1427 | 1428 | 1429 | 1430 | 1431 | 1432 | 1433 | 1434 | 1435 | 1436 | 1437 | 1438 | 1439 | 1440 | 1441 | 1442 | 1443 | 1444 | 1445 | 1446 | 1447 | 1448 | 1449 | 1450 | 1451 | 1452 | 1453 | 1454 | 1455 | 1456 | 1457 | 1458 | 1459 | 1460 | 1461 | 1462 | 1463 | 1464 | 1465 | 1466 | 1467 | 1468 | 1469 | 1470 | 1471 | 1472 | 1473 | 1474 | 1475 | 1476 | 1477 | 1478 | 1479 | 1480 | 1481 | 1482 | 1483 | 1484 | 1485 | 1486 | 1487 | 1488 | 1489 | 1490 | 1491 | 1492 | 1493 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

