Supplier Agent Functions – Proposed Approach

Stark Response

12 November 2018

Stark

Pure Data.
Powerful Insight.

Monday, 12 November 2018

About Stark

- Stark is a leading provider of energy data and services to non-domestic consumers in the UK.
- Stark provides data collection and aggregation, analytics, metering, asset finance and energy advisory services to over 3,000 industrial, commercial and public sector organisations in the UK. Many of our customers are large energy consultants or suppliers who in turn provide our services on to a still larger set of end users.
- In the electricity market, Stark is an accredited Data Collector and Data Aggregator (DC/DA) for both Half Hourly and Non Half Hourly metering systems. For non-domestic Half Hourly metering systems we are the industry number two, behind the legacy monopoly provider. We've consistently grown our portfolio though our relentless focus on data quality, customer service, and market leading analytical tools.
- Stark plays an important role in the smooth functioning of the UK electricity market and settlements: Stark processes data for settlement for around 15%[1] of the UK's electricity consumption every day.
- In the Gas market, Stark is an Ofgem registered meter reader under ESTA's ASPCoP guidelines, an AMR Service Provider (ASP), and a Meter Asset Manager (MAM).
- With over 30,000 registered users, Stark's energy analytics platform is one of the most popular services of its kind for energy, carbon and sustainability professionals in the UK.
- Stark has recently entered the domestic metering space, working with suppliers[2] and SMSOs to deploy SMETS1 and SMETS2 smart metering systems, agent services, elective Half Hourly settlement and analytics.

[1] Stark Analysis, 28 September 2017
[2] Stark, *Trilliant Networks and Stark Finalize Deal Enabling Delivery of SMETS1 Solution Throughout the United Kingdom*, available at: https://www.stark.co.uk/wp-content/uploads/2017/08/14_SMSO_Stark_Trilliant_080117_Final.pdf

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Consultation Response

Q1. Do you have any comments on our updated analysis and thinking?

It is disappointing that after meetings with stakeholders Ofgem's thinking does not appear to have evolved in several areas: data quality, hand-offs, economies of scale and industry change. However, we welcome Ofgem's finding that a central agent would provide no benefit over the current competitive model in these areas. We have no further comments on these areas and refer Ofgem to our previous submissions on these issues which set out our thinking in detail.

We strongly disagree with Ofgem's apparent conclusion that settlement performance is not a particularly important area of differentiation. We expect that a number of other market participants would share our view that it is a fundamental feature for the competitive supplier agent model. Differentiated service levels exist between supplier agents; some seek to achieve compliance with the applicable BSC performance levels, while others strive for higher performance. This is an important element of competition in the market because suppliers often pick a preferred agent on this basis, relative to their requirements and taking into account other competitive factors. We would therefore be interested to understand Ofgem's evidence that settlement performance is less important, and what type of customers may have stated this, because this is does not accord with Stark's view of the market it competes in.

The table below shows the Performance Levels required by suppliers as part of the BSC.

Table 1: BSC Performance Levels by Measurement Class

HH Measurement Class	BSC Performance Level
C – >100 KW, non-domestic	99% Actual Data @ SF
E – <100 KW, non-domestic, CT	99% Actual Data @ R1
F – <100 KW, domestic, CT or WC	90% Actual Data @ R1 and 99% at successive runs
G – <100 KW, non-domestic, WC	90% Actual Data @ R1 and 99% at successive runs

By way of explanation: the performance levels in Measurement Class E and G allow ~40 days to collect 99% Actual Data. For example, an Agent could read these meters fortnightly or perhaps even monthly to achieve compliance and many suppliers have contracted with their Agent on this basis. Conversely, many suppliers prefer their agent to operate Class E and G to the same high standards as Class C, which potentially allows for improved cashflow through faster settlement of larger volumes of actual energy and less exposure to Supplier Charges. A similar approach is

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adopted by many suppliers with MPANs in Measurement Class F, where the performance levels can be met through monthly collection, in time for R1, but greater advantages are met through daily collection, in time for SF. This clearly demonstrates that there is a diverse range of requirements amongst suppliers for settlement performance and is a strong argument in favour of a competitive supplier agent model.

The position in the consultation paper on value added services is also disappointing. We have demonstrated that decoupling core services from value added services will result in the latter becoming more expensive and less viable. Value added services provide positive outcomes for consumers, which cannot be dismissed without clear evidence, given this is a standard feature of competitive markets. Ofgem's statement that "trying to avoid harm" to these services is "not a strong reason to prefer a decentralised supplier agent model"[3] is therefore surely contrary to Ofgem's duty to protect consumer interests, and to promote effective competition outside of existing monopoly parts of the supply chain (e.g. transmission and distribution).

Q2. Do you agree with our proposed position? If not, please explain why.

We welcome and fully support Ofgem's proposed position that the Data Collector (DC) and Meter Operator (MOP) roles should remain competitive as part of their consideration of Market-Wide Half Hourly Settlement (MHHS).

However, we are strongly opposed to the proposed position on Data Aggregation (DA). We note that Ofgem has avoided labelling this proposal as "centralisation"; but it is clear that this is in fact what it is. Indeed, at points the consultation paper itself uses the label, for example when it refers to a "centralised data aggregator" and a "centralised body with a remit to carry out aggregation"[4].

Accordingly, all the same arguments against centralisation that were relevant for DC and MOP also apply to DA, and – absent clear quantifiable evidence to countervailing benefit – should be sufficient justification for maintaining the status quo.

There are good reasons not to mandate centralisation in this area. We explain the three most important below. These are uncontroversial and based on standard competition policy, and there is no evidence of any market failure to suggest a case for restricting competition.

i) Centralised solutions will always be second best in terms of efficiency and innovation in core services, relative to competition. Any decision by Ofgem to move to a centralised DA would therefore have to satisfy a high threshold, based on a clearly identified market failure problem and quantified evidence to establish that centralisation has clear benefits and those benefits outweigh the costs from the reduction in competition that would result. For instance, it would be necessary to

[3] Ofgem, *supplier agent functions – proposed approach*, paragraph 2.72, p22
[4] Ofgem, *supplier agent functions – proposed approach*, paragraph 2.57, p20

show that significantly greater cost efficiency and incentives to innovate could be provided through a centralised DA. The consultation provides no evidence to support this, and we are not aware of any evidence from other sources that Ofgem might intend to rely upon.

It is also clear that a centralised function would require detailed cost and output scrutiny, and that there would be limited scope for benchmarking. Together, these effects would mean a centralised entity would not have incentives to innovate or find efficiency gains. Similarly, an approach that sought to impose required outputs and efficient costs levels for a central entity would be cumbersome and would not allow sufficient flexibility to respond to changing customer demand and support innovation. Related to this, a centralised system would create avoidable single-system vulnerability.

The existing NHH DA software that has been centrally developed and maintained by Elexon is a pertinent example of these challenges. Over a 20-year period there has been no innovation to this software and enhancements have proven cumbersome to implement. For example, earlier this year default data was used for multiple settlement days, resulting in suppliers being charged penalties for the missing data. The root cause was an undetected bug in an upgrade of this software when using Oracle 12c, Elexon took six days to first identify a workaround and then apply a fix[5]. Were this in the HH market the impact would have been mitigated because each DA uses their own in-house software and competitive pressure would have forced a quicker turnaround.

ii) Innovation in value-added services is less likely under a centralised model. A centralised DA would have less incentive to respond efficiently to the individual needs of customers for value added services. This is demonstrated by the fact that individual DAs responded to the introduction of EMR arrangements and the Capacity Market by innovating their systems to provide additional aggregations outside of the usual settlement calendar. There was no obligation on them to do so and the outcome supports significant revenue generation for end customers. It is highly unlikely a centralised DA would have taken the initiative to respond in this way, because it would not have been required to do so to avoid losing its customers. The flexibility market is set to grow and competitive DAs have already demonstrated their ability to respond to evolving customer needs – further innovation from DAs can be expected. In this regard, we think it would be strange for Ofgem to propose a system that restricts competition and innovation at a time when the Government (through HM Treasury) is currently consulting on the role of the regulators in encouraging innovation in the utilities sectors.[6]

[5] See Elexon Circulars EL02842, EL02843, EL02845, EL02846 and EL02849

[6] See HM Treasury, Encouraging innovation in regulated utilities: consultation, October 2018: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752041/encouraging_innovation_in_regulated_utilities.pdf

iii) Centralisation can also involve administrative costs and delays. In this context they will be more significant than building on existing, distributed HH DA systems. Moreover, sending market-wide disaggregated data to a centralised DA over the DTN will be costly and additional to set up costs. As noted above, in a centralised system Ofgem will have a regulatory burden in ensuring the centralised solution delivers intended outcomes and response to changed customer and market conditions, which competition and innovation would otherwise respond to automatically. This regulatory oversight will impose additional system-wide costs; whilst competitive pressures in the existing model will deliver the same benefits at no additional cost.

The consultation document refers to Elexon's Foundation Programme, which it claims, "will enable the central settlement systems to work with disaggregated data"[7]. Architecture options for this upgrade are reproduced in the Appendix. The first option, said to be preferred by Elexon, Ofgem and the DAB, relies on centralising DA. The second option, also represented in the Appendix, utilises the existing competitive DA model. However, the comparison represented in the diagrams for the two options is misleading. The "Data Access" and "Data Visualisation" services that comprise the "Half Hourly Platform" in the first diagram are services provided **today** by Supplier Agents to any authorised third party but these aren't replicated on the second diagram, which makes the competitive DA model look less attractive. When this is corrected it is clear that a move to a centralised DA is disproportionate.

Q3. Do you consider that settlement data will still need to be aggregated for submission into central settlement systems in future? In light of this, do you consider that a data aggregation role is required?

The functions and activities performed by DAs will still be required as an input to settlement calculations, and the consultation document recognises this in paragraph 3.16. Therefore, the role is still required, as is someone to perform it. The current model wasn't driven by restrictions in technology but by a desire to move away from monopolies that had proven inefficient and detrimental to consumers.

The consultation paper suggests that centralising DA is a way of "future-proofing the Target Operating Model"[8]. Referring to Elexon's Foundation Programme, paragraph 3.14 suggests that "having data in a disaggregated form could provide more flexibility to implement future changes, such as developing new aggregations of data" and uses the example of potential future supply market models. But this can easily be achieved through the existing competitive DA model using a similar process to the EMR and Capacity Market arrangements. For instance, the appointed DA could be notified to run aggregations of specific meter sets and/or settlement periods, flexibly and outside of any scheduled aggregation runs. Thus, the TOM is already effectively future proofed by a competitive supplier agent market that includes DA. Indeed, as the flexibility market grows, so too

[7] Ofgem, *Supplier agent functions – proposed approach,* paragraph 3.13, p27
[8] Ofgem, *Supplier agent functions – proposed approach,* paragraph 3.14, p27

will the potential for DA to become a greater area of differentiation for Supplier Agents which will encourage innovation - centralising DA removes that potential and will therefore result in the opposite, less innovation.

There are also important risks that would arise from centralisation that should not be overlooked, and which weigh against such a proposal. Most importantly, the centralised storage of data carries an inherent security risk. This is a serious concern, one which was recognised during the development of the DCC and is the reason why DCC is merely a transitory provider of data. Furthermore, moving DA to Central Systems increases the chance of a single, catastrophic failure of settlement.

Maintaining a competitive DA model effectively mitigates both risks and is an important reason why the status quo should be preserved.

Q4. Do you agree with our consideration of our proposed position against our assessment principles?

We agree with Ofgem's consideration of their proposed position on DC and MOP against the assessment principles. However, the proposed position on DA does not appear to have been considered against the assessment principles at all. We provide our own consideration below.

Principle	Stark Assessment
Alignment with regulatory stances, particularly on competition and innovation	**Maintain competitive DA** No "clear evidence" has been presented to suggest centralising the DA function is in consumers' interests or that a centralised solution will deliver significantly greater cost efficiencies and incentives for innovation. Without this, any decision to remove competition in the DA role would be contrary to Ofgem's existing regulatory stances on competition and innovation, and would call into question whether DA centralisation could be said to be consistent with Ofgem's regulatory duties. The competitive model effectively delivers on both points.
Delivering settlement functions efficiently	**Maintain competitive DA** Competitive DA currently delivers settlement functions efficiently and at low cost. Therefore, it cannot be cost effective to build a new aggregation layer within Central Systems. Sending disaggregated data across the DTN would make centralised DA even less cost effective.

Supporting the realisation of consumer benefits in a future market	**Maintain competitive DA** Due to their size, a centralised DA will struggle to respond effectively to the needs of individual consumers. Competitive DAs are better placed to secure consumer benefits in a future market.
Limiting unintended consequences	**Maintain competitive DA** Ofgem does not appear to have properly considered any unintended consequences of centralising DA. This includes unnecessary impact to the existing HH settled advanced meter market, impact to commercial contracts, restriction of innovation and negative consumer outcomes.
Flexibility in adapting to an uncertain future	**Maintain competitive DA** Centrally developed DA software in the NHH market is rigid and inefficient and would prevent innovative solutions being developed by industry participants to deal with changing customer demand and changing market circumstances. Conversely, individual DA software in the HH market has proven to be agile and adaptable. This provides an advantage in responding to new technologies in an uncertain future.
Complying with legal requirements	**Either approach** Neutral, depending on sound design and choice.

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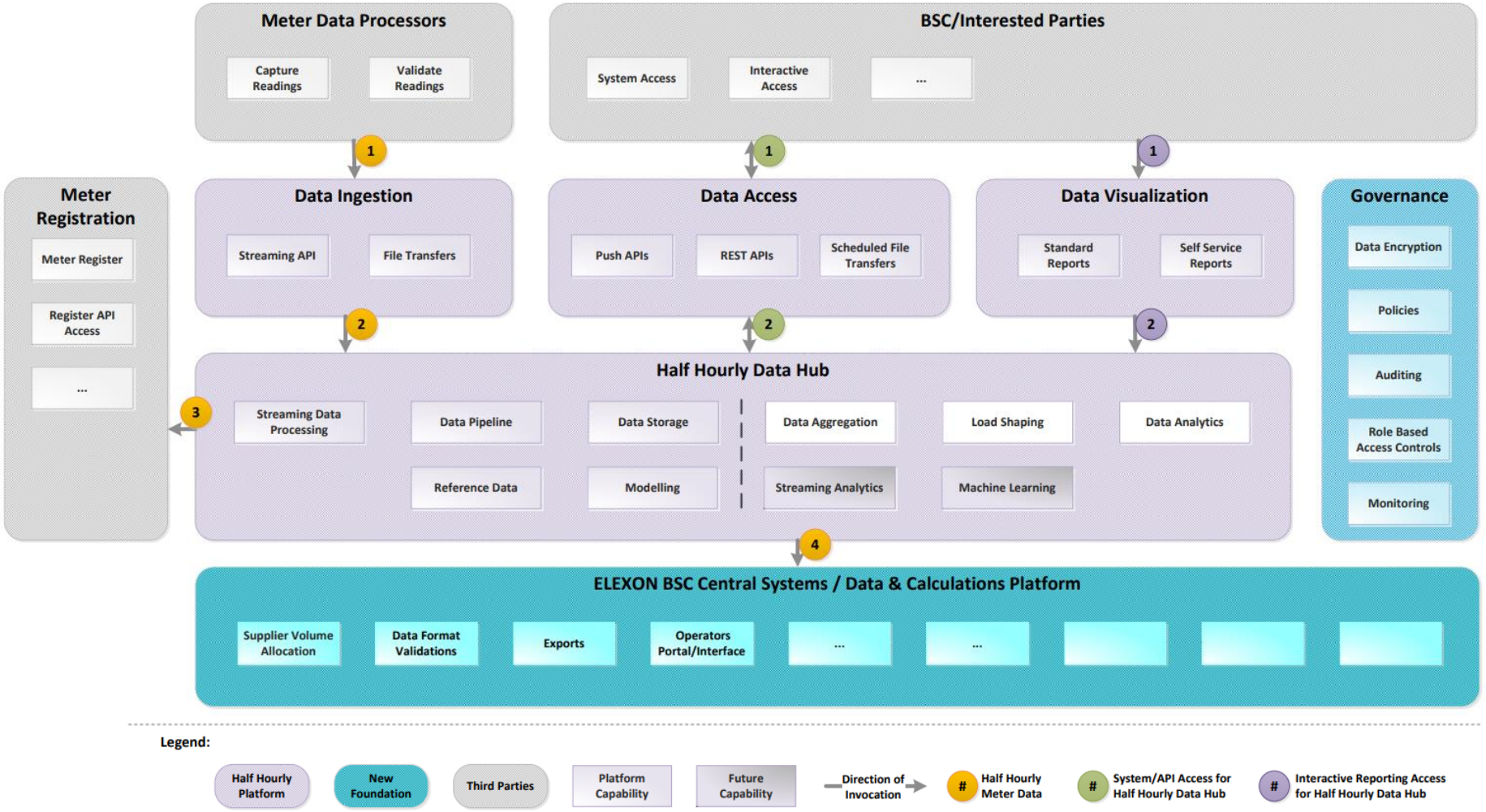
Appendix A: Architecture Option 1



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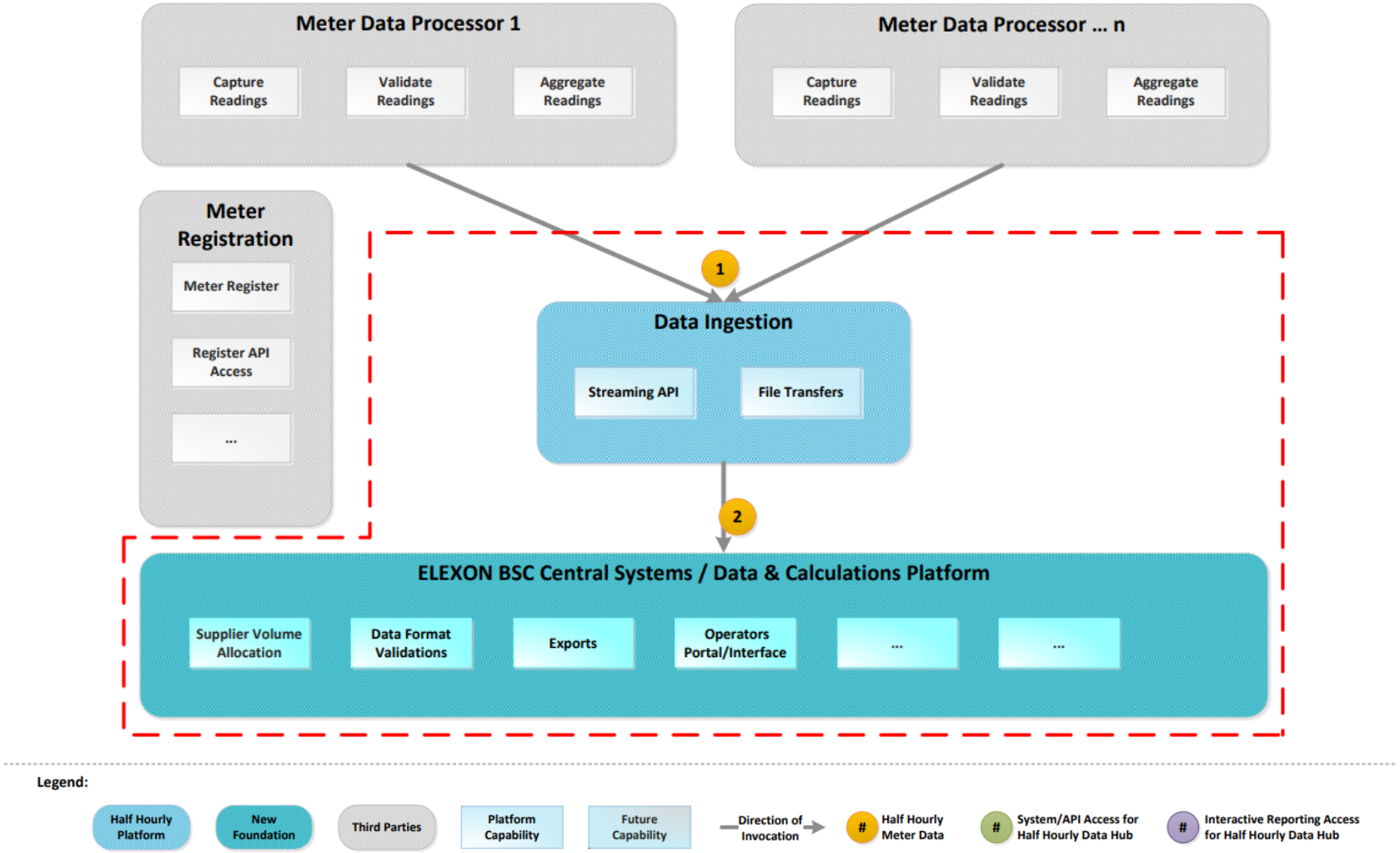
Appendix B: Architecture Option 2



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