

Practical considerations adopting latest seismic data standards

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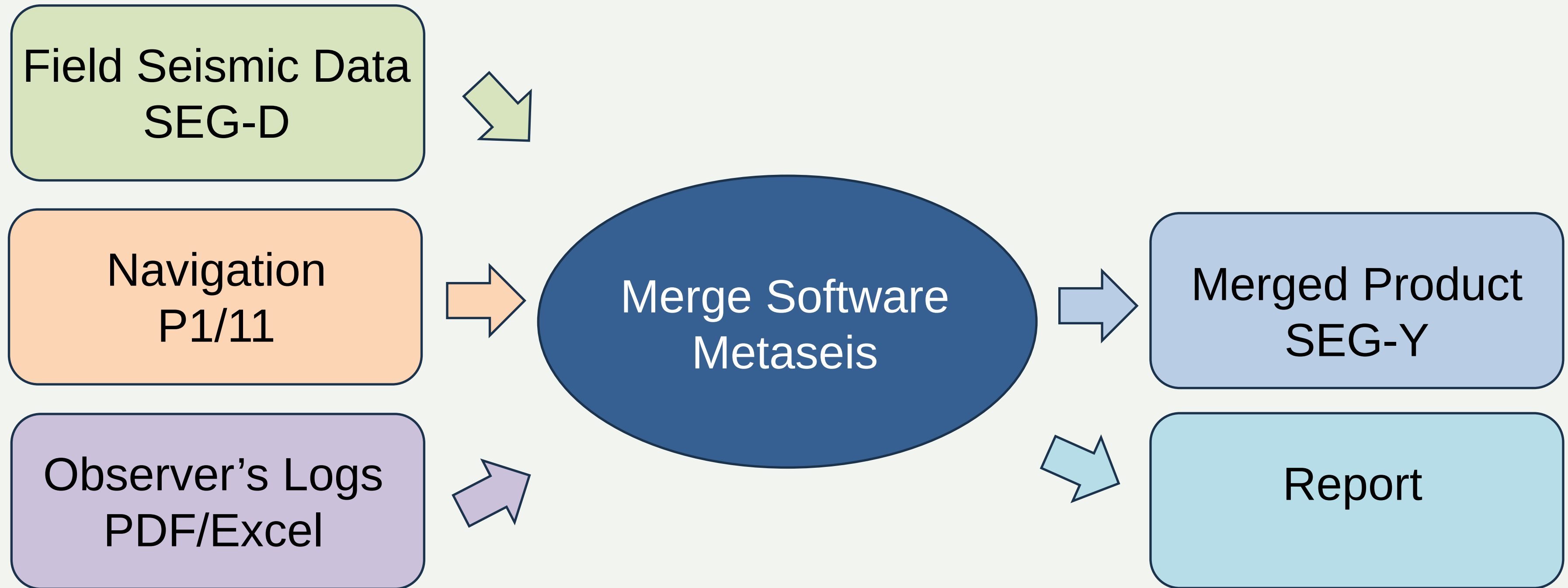


moveout

BETTER DATA AT YOUR FINGERTIPS

Seismic 2025

Navigation-Seismic Merge



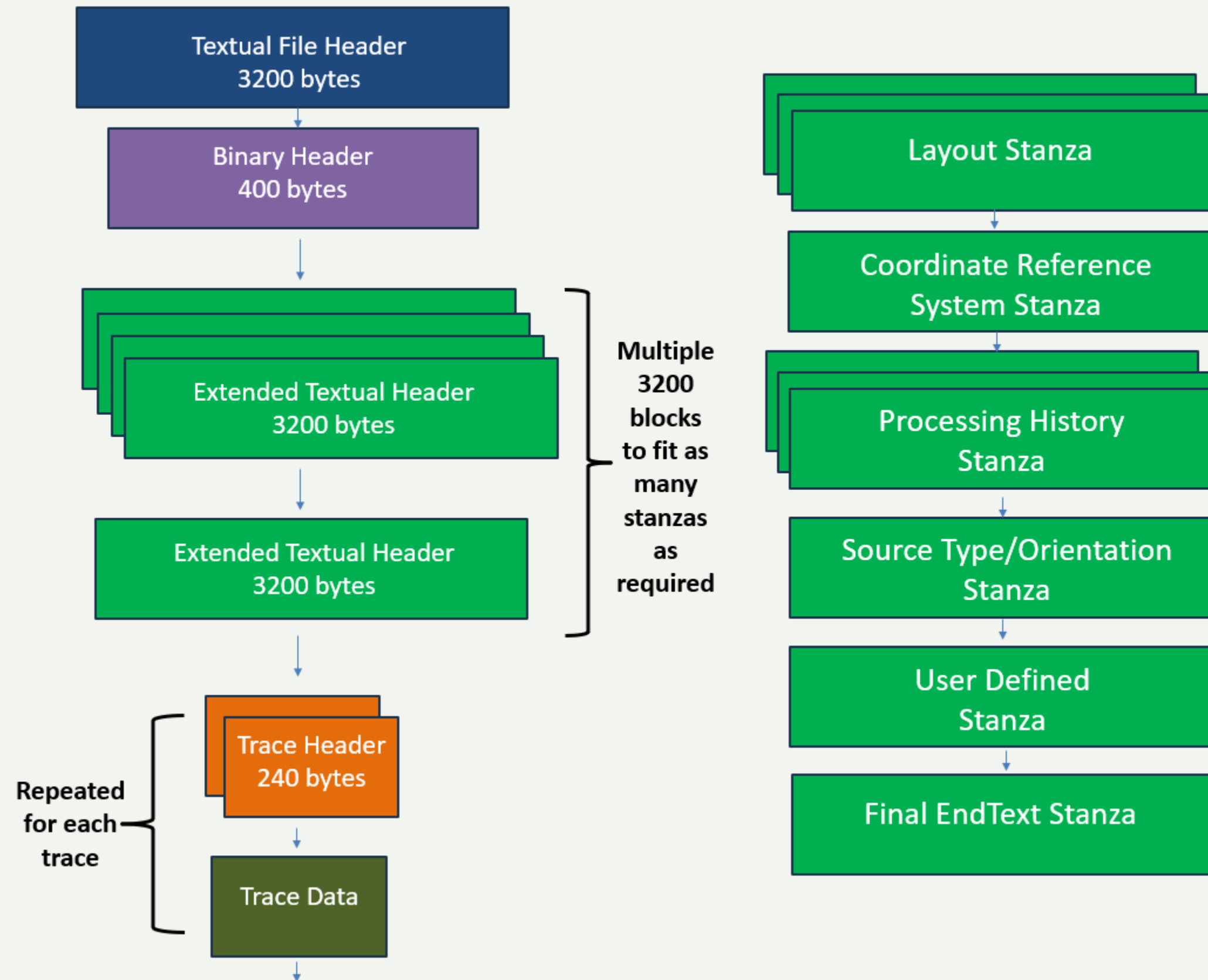
Aims for latest data formats

Increased sample rates, precision and volume

Incorporate metadata into headers

Machine readable

SEG-Y version 2.1

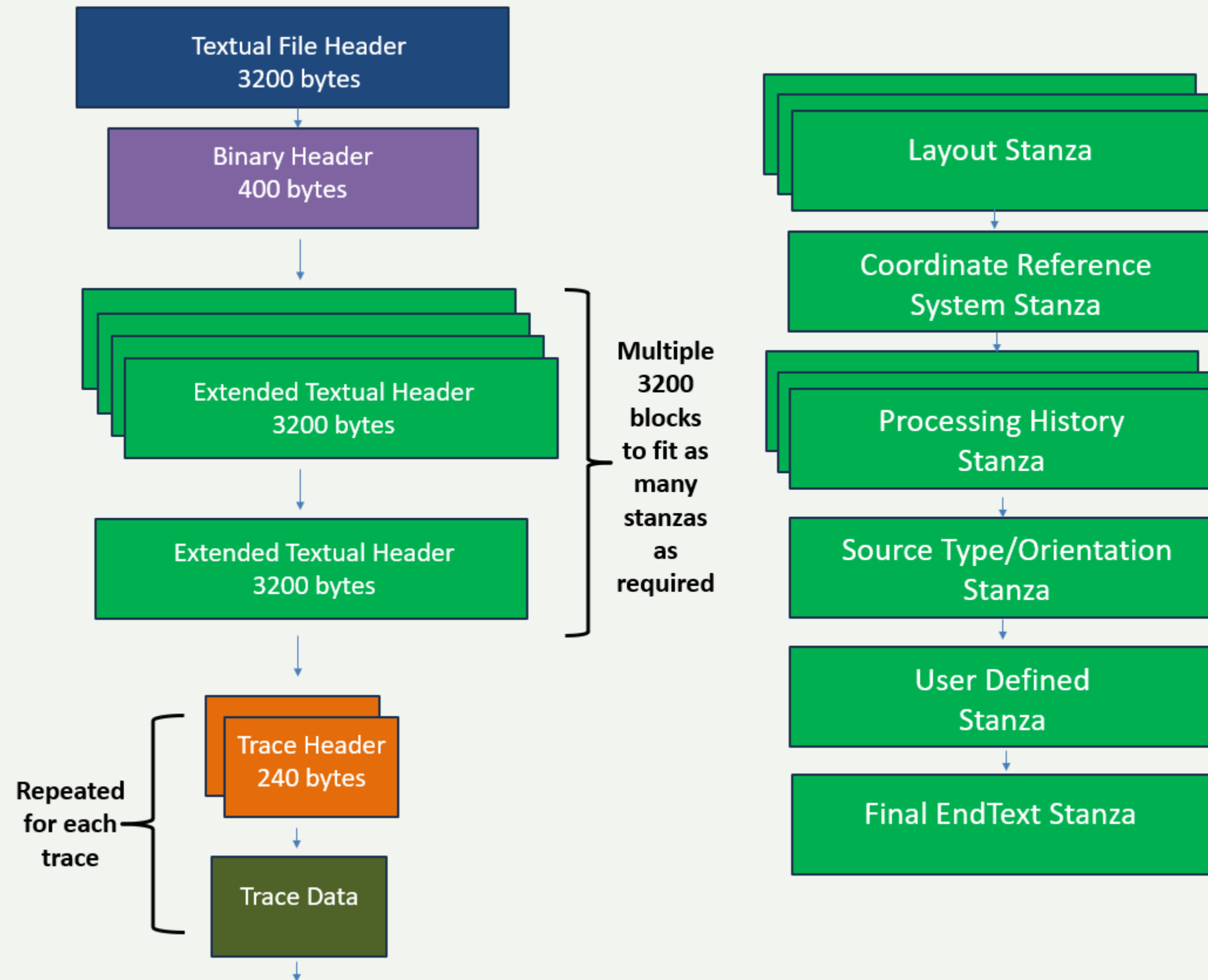


SEG-Y v2.1 Layout XML Stanza

```
((SEG:Layout))
<?xml version="1.0" encoding="utf-8"?>
<seg-y-layout name="rev2">
<desc>SEG-Y Rev 2 Moveout Data 3D Navigation
Merge</desc>
<entry name="linetrc" byte="1" type="linetrc"/>
<entry name="reeltrc" byte="5" type="reeltrc"/>
<entry name="ffid" byte="9" type="int4"/>
<entry name="chan" byte="13" type="int4"/>
<entry name="espnun" byte="17" type="int4"/>
<entry name="cable_num" byte="25" type="int4"/>
<entry name="trctype" byte="29" type="int2"/>
<entry name="offset" byte="37" type="int4"/>
<entry name="relev" byte="41" type="elev4"/>
<entry name="selev" byte="45" type="elev4"/>
<entry name="sdepth" byte="49" type="elev4"/>
<entry name="rdatum" byte="53" type="elev4"/>
<entry name="sdatum" byte="57" type="elev4"/>
<entry name="wdepthso" byte="61" type="elev4"/>
<entry name="wdepthrc" byte="65" type="elev4"/>
<entry name="ed_scal" byte="69" type="int2"/>
<entry name="co_scal" byte="71" type="int2"/>
<entry name="sht_x" byte="73" type="coord4"/>
.....
```

```
<entry name="offset" byte="129" type="ieee64" if-non-
zero="1"/>
<entry name="nsamps" byte="137" type="uint4" if-non-
zero="1"/>
<entry name="nanosecs" byte="41" type="int4"/>
<entry name="dt" byte="145" type="ieee64" if-non-zero="1"/>
<entry name="cable_num" byte="153" type="int4"/>
<entry name="last_trc" byte="159" type="int2"/>
<entry name="cdp_x" byte="161" type="ieee64" if-non-zero="1"/>
<entry name="cdp_y" byte="169" type="ieee64" if-non-zero="1"/>
</extension>
<extension name="SEG000002">
<entry name="line_num" byte="1" type="ieee64"/>
<entry name="time_diff_nav" byte="9" type="ieee64"/>
<entry name="time_diff_system" byte="17" type="ieee64"/>
<entry name="source_num" byte="25" type="ieee64"/>
</extension>
</seg-y-layout>
```

SEG-Y version 2.1





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Setting the benchmark in delivering high-quality accessible geoscience data

