

## 917 A REBUTTAL

### 918 A.1 Re: Supervisor - Weaknesses: Difference in Inference Times

Table 7: Comparison of Average Response Length to Inference Time Across Different Models and Experiments

Experiment	Model	Average Response Length	Average Inference Time per Document (ms)
GEITje	IC - FewShot	17.0	41.0
	IC - ZeroShot	16.1	33.0
	Fine-Tuning	9.5	24.0
Llama	IC - FewShot	160.8	228.0
	IC - ZeroShot	90.2	120.0
	Fine-Tuning	10.5	20.0
Mistral	IC - FewShot	36.0	68.0
	IC - ZeroShot	37.7	60.0
	Fine-Tuning	9.5	22.0

### 919 A.2 QUESTION 2. Truncation - Distribution per Class

Table 8: Token Distribution using Llama Tokenizer

Tokens	
Count	20818
Mean	4340
Std	15456
Min	74
25%	612
50%	1031
75%	2378
Max	618067

Table 9: Token distribution per class using Llama’s Tokenizer

label	count	mean	std	min	25%	50%	75%	max
Actualiteit	800	1630	8662	165	513	733	1305	234499
Agenda	2544	2000	10122	74	517	1054	1918	314952
Besluit	625	2183	3918	227	387	979	2619	56288
Brief	1056	3138	3082	312	1363	2297	3842	56355
<b>Factsheet</b>	<b>214</b>	<b>12337</b>	<b>26342</b>	<b>261</b>	<b>2327</b>	<b>5927</b>	<b>11868</b>	<b>230752</b>
Motie	7639	901	1680	239	514	634	835	75020
<b>Onderzoeksrapport</b>	<b>1174</b>	<b>31678</b>	<b>40611</b>	<b>683</b>	<b>12640</b>	<b>22654</b>	<b>38088</b>	<b>618067</b>
Raadsadres	1621	2099	3076	108	737	1261	2256	35101
<b>Raadsnotulen</b>	<b>231</b>	<b>68093</b>	<b>22624</b>	<b>4606</b>	<b>54820</b>	<b>71582</b>	<b>84302</b>	<b>109188</b>
Schriftelijke Vraag	2932	3614	12015	497	1802	2474	3438	365774
Voordracht	1982	1433	1007	376	918	1133	1535	11156

### A.3 QUESTION 3. Calculation P, R, F1

Table 10: Classification Report of GEITje’s performance using the Few-Shot Prompt

	precision	recall	f1-score	support
PredictionError	0.00	0.00	0.00	0
actualiteit	0.93	0.71	0.81	100
agenda	0.95	0.95	0.95	100
besluit	0.94	0.72	0.81	100
brief	0.88	0.82	0.85	100
factsheet	0.90	0.37	0.52	100
motie	0.95	0.84	0.89	100
onderzoeksrapport	0.61	0.71	0.66	100
raadsadres	0.84	0.78	0.81	100
raadsnotulen	0.84	0.96	0.90	100
schriftelijke vraag	0.98	0.91	0.94	100
voordracht	0.60	0.99	0.75	100
<b>accuracy</b>			0.80	1100
<b>macro avg</b>	0.79	0.73	0.74	1100
<b>weighted avg</b>	0.86	0.80	0.81	1100

### A.4 QUESTION 4. Class. Reports & Confusion Maxtrixes

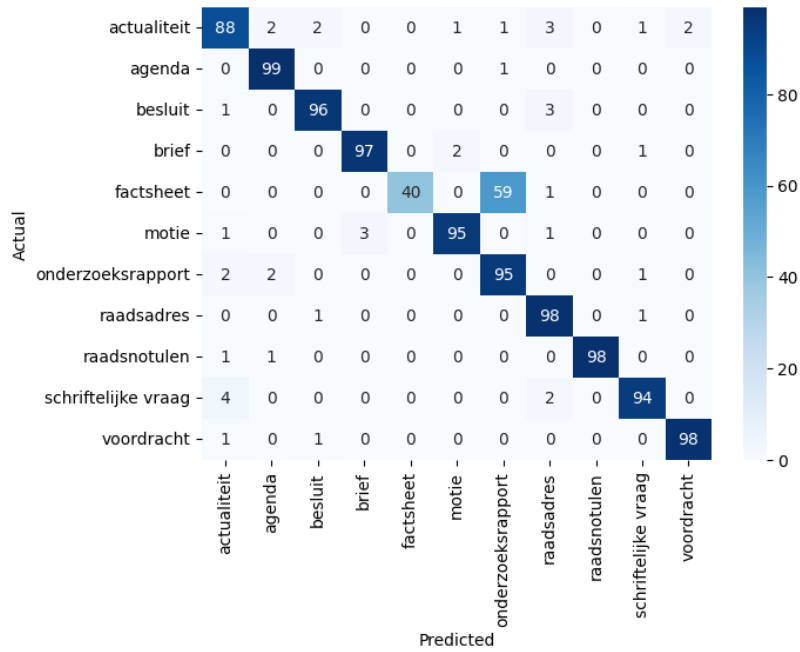


Figure 5: Confusion Matrix of Fine-tuned Mistral. Trained for three epochs; first 200 tokens as input.

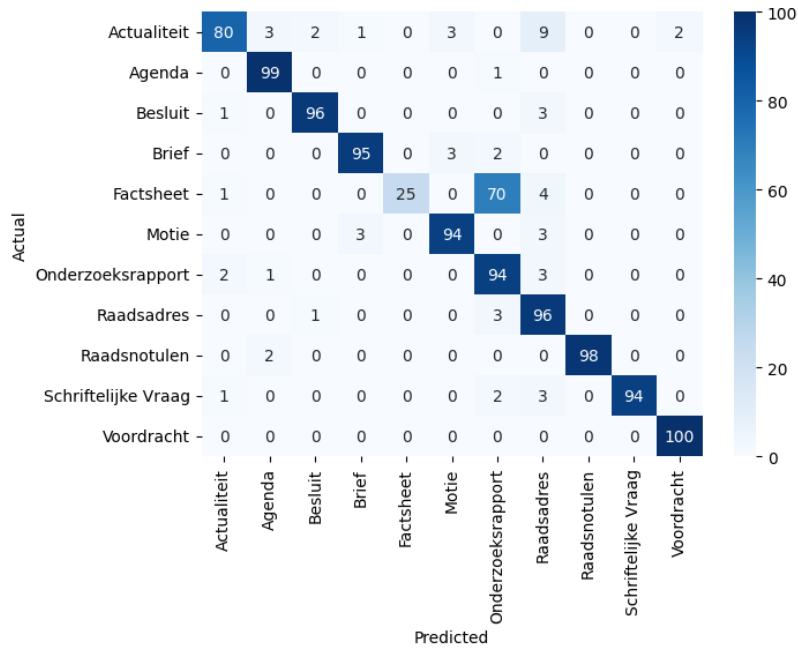


Figure 6: Confusion Matrix of Linear SVM Using First 200 Tokens as Input

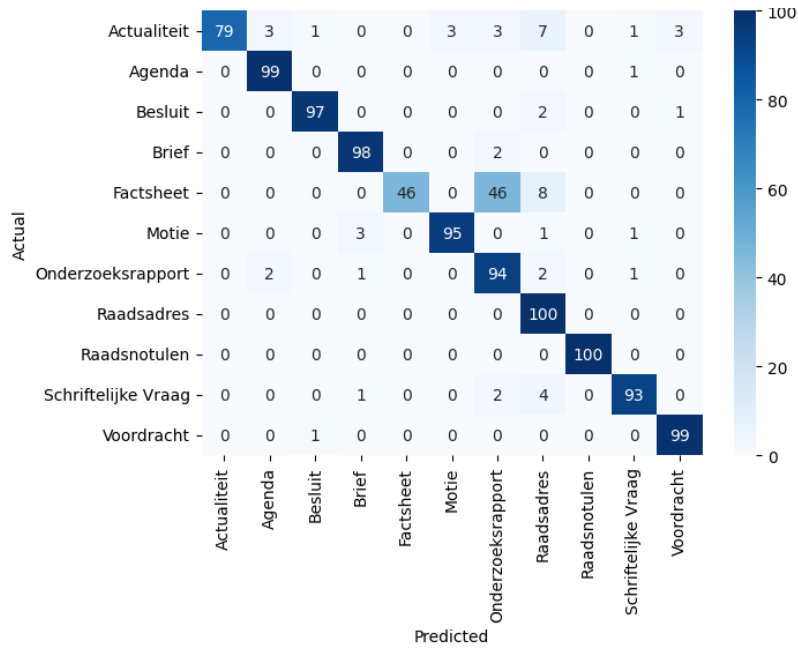


Figure 7: Confusion Matrix of Linear SVM Using Full Text as Input.

**Table 11: Classification Report of Fine-Tuned Mistral’s Performance**

	precision	recall	f1-score	support
actualiteit	0.90	0.88	0.89	100
agenda	0.95	0.99	0.97	100
besluit	0.96	0.96	0.96	100
brief	0.97	0.97	0.97	100
factsheet	1.00	0.40	0.57	100
motie	0.97	0.95	0.96	100
onderzoeksrapport	0.61	0.95	0.74	100
raadsadres	0.91	0.98	0.94	100
raadsnotulen	1.00	0.98	0.99	100
schriftelijke vraag	0.96	0.94	0.95	100
voordracht	0.98	0.98	0.98	100
<b>accuracy</b>			0.91	1100
<b>macro avg</b>	0.93	0.91	0.90	1100
<b>weighted avg</b>	0.93	0.91	0.90	1100

**Table 12: Classification Report of Linear SVM with First 200 Tokens as Input**

	precision	recall	f1-score	support
actualiteit	0.94	0.80	0.86	100
agenda	0.94	0.99	0.97	100
besluit	0.97	0.96	0.96	100
brief	0.96	0.95	0.95	100
factsheet	1.00	0.25	0.40	100
motie	0.94	0.94	0.94	100
onderzoeksrapport	0.55	0.94	0.69	100
raadsadres	0.79	0.96	0.87	100
raadsnotulen	1.00	0.98	0.99	100
schriftelijke vraag	1.00	0.94	0.97	100
voordracht	0.98	1.00	0.99	100
<b>accuracy</b>			0.88	1100
<b>macro avg</b>	0.92	0.88	0.87	1100
<b>weighted avg</b>	0.92	0.88	0.87	1100

**Table 13: Classification Report of Linear SVM with Full Text as Input**

	precision	recall	f1-score	support
actualiteit	1.00	0.79	0.88	100
agenda	0.95	0.99	0.97	100
besluit	0.98	0.97	0.97	100
brief	0.95	0.98	0.97	100
factsheet	1.00	0.46	0.63	100
motie	0.97	0.95	0.96	100
onderzoeksrapport	0.64	0.94	0.76	100
raadsadres	0.81	1.00	0.89	100
raadsnotulen	1.00	1.00	1.00	100
schriftelijke vraag	0.96	0.93	0.94	100
voordracht	0.96	0.99	0.98	100
<b>accuracy</b>			0.91	1100
<b>macro avg</b>	0.93	0.91	0.91	1100
<b>weighted avg</b>	0.93	0.91	0.91	1100