Status report about the differences between two checking codes:
CHEX and TEST-EXF

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Both of the programs check single ENTRY or TRANS in two steps.
At the first step program checks:
- system identifier sequence,
- information-identifier keywords,
- codes according to the dictions of the EXFOR.

At the second step program checks syntax rules and keywords interconnection.
The response on the errors in the entries is given in the following table for both programs.

	name	Checking parameters	CHEX	TEST-EXF	comments
	Center identification char.		-	+	
	Record identification	Col.67-79	-	+	
	Alteration flag	Col.80	+	+	
1.	**System identifiers**				
	System identifier sequence		+	+	
	TRANS	N1,N2	-	+	
	ENDTRANS	N1,N2	-	+	
	ENTRY	N1,N2	-	+	
	ENDENTRY	N1,N2	-	+	
	SUBENT	N1,N2	+	+	
	ENDSUBENT	N1,N2	-	+	
	BIB	N1,N2	-	+	I remember that it was on Alpha-station
	ENDBIB	N1,N2	-	+	
	COMMON	N1,N2	-	+	I remember that it was on Alpha-station
	ENDCOMMON	N1,N2	-	+	
	DATA	N1,N2	-	+	
	ENDDATA	N1,N2	-	+	
2.	**BIB section**				
	Legality of KEYWORD		+	+	
	Legality of coded information		+	+	
	The opening parenthesis in col.12		-	+	I remember that it was on Alpha-station
3.	**COMMON and DATA sections**				
	Legality of data headings		+	+	
	Legality of column location (1,12,…)		+	+	
	Legality of one-character pointer		+	+	
	Multiple representation of independent variables		+	+	

			+	+	In both cases (legal or illegal) CHEX receives the error. For example, LVL-NUMB
4.	**DATA section**				
	cross check for consistency of quantities and units of the table		+	+	
	Sequence of independent and dependent fields		+	+	
	Sequence of additional information and associated quantities		+	+	
	Line sequence (decrease or increase)		+	+	
	Presence the independent and dependent values		+	+	
	The validation of that 'the error must be >0 only'		-	+	

Common remarks.
1. All keywords are checked according to the corresponding dictionaries.
2. To work with CHEX more easy than with TEST-EXF. TEST-EXF gives a lot of warnings that are not needed. Such as:
   - 'Repetition in 1st column' – if DATA has more than argument col.;
   - 'EN/MOM-SEC is needed' – if E-LVL is given but in BIB section the description of E-LVL absents;
   - 'DATA section of SUBENT 003 has not independent variable' – if the table of reaction rate is given as a function of temperature K9 or if data has two variables, for example, 'EN' and 'E-LVL', and 'E-LVL' is the first col. in the table;
3. Sometimes TEST-EXF gives quite strange errors. Such as:
   - 'Word "0" is absent in Dictionary 30' – if reaction code is '(5-B-11(A,0),,EN)' that is legal according to the description (p.S.8, LEXFOR);
   - 'Balance is absent !' – if the reaction code is '(5-B-11(A,EL),,WID)' that is legal according to the description (p.7.4, EXFOR Manual);
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4. TEST-EXF works only in DOS operating system. It is available only with Windows-98 or Windows-95. CHEX works in any version of the Windows operating system.