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Committee on Legal Affairs and the Internal Market

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2003/2130(INI)**

27 August 2003

DRAFT REPORT

with recommendations to the Commission on a European disability rating scale
2003/2130(INI)

Committee on Legal Affairs and the Internal Market

Rapporteur: Willi Rothley

(Initiative - Rule 59 of the Rules of Procedure)

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PROCEDURAL PAGE

At the sitting of ... the President of Parliament announced that the Committee on Legal Affairs and the Internal Market had been authorised to draw up an own-initiative report, pursuant to Rule 163 of the Rules of Procedure, with recommendations to the Commission on a European disability rating scale.

The Committee on Legal Affairs and the Internal Market had appointed Willi Rothley rapporteur at its meeting of 8 July 2003.

It considered the draft report at its meeting(s) of

At the latter/last meeting it adopted the draft resolution by ... votes to ..., with ... abstention(s)/unanimously.

The following were present for the vote: Giuseppe Gargani (chairman), ... (vice-chair(wo)man), ... (vice-chair(wo)man), Willi Rothley (rapporteur), ..., ... (for ...), ... (for ... pursuant to Rule 153(2)), ... and

The report was tabled on 27 August 2003.

DRAFT EUROPEAN PARLIAMENT RESOLUTION

with recommendations to the Commission on a European disability rating scale (2003/2130(INI))

The European Parliament,

- having regard to Article 192, second paragraph, of the EC Treaty,
 - having regard to Rules 59 and 163 of its Rules of Procedure,
 - having regard to the report of the Committee on Legal Affairs and the Internal Market (A5-0000/2003),
- A. whereas there are no Community provisions on which to base assessment of bodily injury,
- B. whereas no proposal within the meaning of Rule 59(2) of the Rules of Procedure is in preparation,
1. Requests the Commission to submit to Parliament, on the basis of Article 308 of the EC Treaty, a proposal FOR A Council recommendation on a European disability rating scale, following the detailed recommendations below;
 2. Confirms that the recommendations respect the principle of subsidiarity and the fundamental rights of citizens;
 3. Considers that the requested proposal will not have any financial implications;
 4. Instructs its President to forward this resolution and the accompanying detailed recommendations to the Commission and Council.

ANNEX TO THE DRAFT RESOLUTION

DETAILED RECOMMENDATIONS ON THE CONTENT OF THE PROPOSAL REQUESTED

Draft Commission proposal for a

COUNCIL RECOMMENDATION

on e European disability rating scale

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 308 thereof,

Having regard to the proposal from the Commission,

Whereas

- (1) assessment of and compensation for bodily injury are based in the individual Member States on different laws and on traditions deriving from different judicial practices and schools of thought;
- (2) compensation for bodily injury frequently gives rise to disputes and litigation with cross-border implications;
- (3) to facilitate free movement of persons within the internal market, assessment practices in the Member States should to some extent be harmonised;
- (4) in view of the stage that Community law has now reached in the course of its evolution and having regard to the subsidiarity and proportionality principles, Member States should be recommended to apply a European rating scale when assessing bodily injury;
- (5) assessment looks at disabilities (impairments of physical and/or mental integrity) which are medically identifiable and thus measurable by a doctor; assessment of purely subjective disabilities which can be explained medically (these are plausible but not identifiable and so not measurable) can be reproducible only if it uses one and the

same rating: a benchmark has to be objective before changes can be made to it;

- (6) assessment requires a unit and a system; in order to avoid excessively radical changes to the medico-legal conventions in use by European experts, it has been decided to use a percentage-based system;
- (7) disability should be defined as follows: ‘the definitive reduction of physical and/or mental potential which can be identified or explained medically, together with the pain and mental suffering known by the doctor to be a normal concomitant of the sequela plus the everyday consequences which commonly and objectively accompany that sequela’;
- (8) the disability rating is ‘the degree of difficulty, measured against a theoretical maximum of 100%, experienced by any subject with sequelae thus quantified in performing the customary movements and actions of everyday non-occupational living, thus the degree of his “personal disability”’;
- (9) the percentage disability is not a unit of measurement but a unit of assessment, the result of combining measurements of a range of phenomena, using a range of instruments and so expressed in a range of units, with an intuitive opinion prompted by experience and the art of evaluating imponderable factors;
- (10) the European Scale is not a handbook of post-traumatic pathology or a summary of the assessment process; it is meant to be used solely by experts, doctors familiar with the principles of civil-sector legal medicine and the rules conventionally applied to pre-existing conditions and multiple disabilities;
- (11) the European Scale is not a ‘maxi-scale’ but a list of guide ratings for impairments of each organ and function; at the same time it is sufficiently detailed to serve in future, perhaps, as a reference scale in the area of personal liability insurance;
- (12) some types of sequelae (e.g. affecting the eyes, ENT, mouth, etc.) require the involvement of a specialist in the area in question; the report which the medical expert receives from the specialist he consults must contain all the technical data and all the relevant factors which will enable the medical assessor to reach a verdict on imputability and quantify post-traumatic sequelae;
- (13) the ratings suggested are for the individual as a whole, not for a deficit measured as a proportion of the integrity of an given organ or function (rated as 0%);
- (14) these ratings are for sequelae considered in isolation;

- (15) in the case of multiple sequelae the overall rating is not necessarily the sum of the individual ratings taken separately; it is calculated differently depending on whether the sequelae affect one and the same function (synergistic sequelae) or are not synergistic; the proposed scale contains no pseudo-mathematical formula but appeals to the medical assessor's clinical sense, his common sense and sense of reality;
- for simultaneous injuries to different parts of the same limb or organ, the overall rating is not the sum of the separate ratings but the result of their synergy; it may not be greater than the rating for total loss of the limb or organ;
 - in the case of simultaneous synergistic injuries to different limbs or organs, it is the overall impairment of function which must be assessed;
 - in the event of multiple non-synergistic disabilities, the overall rating has to be lower than the sum of the ratings taken separately, otherwise the ceiling of 100% would be frequently exceeded even though the victim clearly retains some residual capacity; in this case the victim's status has to be compared with typical clinical situations for which disability ratings are known; above all, and this is imperative, it is necessary to explain the concrete situation which is polymorphic but must perforce be reduced to the abstraction of a rating taken in isolation from its context;
- (16) the proposed scale does not provide 'off the shelf' figures but necessitates a clinical approach to sequelae and the analysis of their objective consequences for everyday living; this overall appraisal of post-traumatic status requires the assessor to explain how the disability rating has been arrived at; for example, no rating is suggested for laryngectomy: the assessor will need to quantify the overall impact on everyday living of dyspnoea plus aphonia or dysphonia (one rating on the Scale for each of these sequelae);
- (17) in the case of post-traumatic elbow ankylosis in an amputee who had previously lost the hand on that same side, the rating will obviously not be the same as the one that would be given for the same ankylosis in a subject who had not lost his hand;
- (18) having chosen to focus on functionality wherever possible, the proposed scale suggests, for lower-limb amputation, ratings which assume that the patient is correctly fitted with a prosthesis – the commonest situation in practice; except perhaps where a foot is amputated, the victim cannot walk or stand without a prosthesis; these ratings may be modified if the prosthesis is ineffective or, conversely, if it is highly effective;
- (19) likewise, and irrespective of the function concerned (walking, hearing, etc.), if a prosthesis, brace or other aid supplied to the patient reduces his functional impairment, assessment of that impairment takes account of the benefit gained;

- (20) situations not described are assessed by comparison with clinical situations which are described and quantified;
- (21) situations which are exceptional and those which are strictly theoretical and impossible given the range of treatments on offer nowadays have deliberately been ignored;
- (22) the Scale is a guide, and in no way mandatory; it is indicative only, and this fact must be particularly emphasised when a very high disability rating is being set;
- (23) the rating must be routinely underpinned by an explanation and this is essential in the case of severe sequelae;
- (24) a European Observatory for the Scale will continuously revise the Scale, taking into account comments, justifiable criticisms, problems in its use, methods of appraisal, and advances in medical knowledge;

HEREBY RECOMMENDS

that Member States take the appropriate steps to ensure that the proper authorities use the European Rating Scale, as reproduced in the Annex, as a frame of reference when assessing disability.



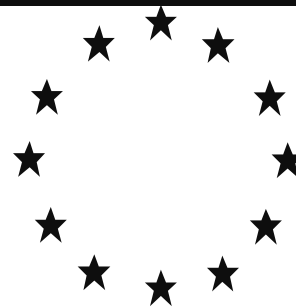
Proposed European disability rating scale



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I. NERVOUS SYSTEM



I – NERVOUS SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

Where the Scale envisages complete deficit only, partial sequelae should be assessed on the basis of the deficit observed, with reference to the rating for total loss.

NEUROLOGY

a) Motor and sensorimotor sequelae

Complete tetraplegia, depending on level <ul style="list-style-type: none">• C2 to C6• below C6	95% 85%
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Complete hemiplegia <ul style="list-style-type: none"> • with aphasia • without aphasia 	90% 75%
Complete paraplegia, depending on level	70 to 75%
Complete cauda equina impairment, depending on level	25 to 50%

b) Cognitive disorders

Analysis of neuropsychological deficit syndromes has to refer to precise signs and concepts. So-called 'frontal' syndrome corresponds in fact to entities which are now well defined and whose associated deficits of varying severity produce extremely polymorphic clinical pictures.

It is thus essential that assessment of the rate of disability should be based on precise specialist medical reports which correlate the initial lesions with the data from clinical and paraclinical examinations.

True frontal syndrome

Major form with apragmatism with serious impairment of ability to form and sustain social and family relationships	60 to 85%
Severe form with changes in instinctual behaviour, loss of initiative, mood disorders, precarious social and family relationships	35 to 60%
Moderate form with relative bradypsychia, memorisation difficulty, mood disorders and repercussions on social and family relationships	20 to 35%
Minor form with distractibility, slowness, difficulty in memorisation and grasping complex ideas. Little or no impairment of ability to sustain social and family relationships	10 to 20%

2) Communication disorders

Major aphasia with jargonaphasia, alexia, disturbances of comprehension	70%
Minor form: disturbances of naming and repetition, paraphasia. Comprehension is retained	10 to 30%

3) Memory disorders

Full Korsakoff's syndrome	60%
Associated disorders: frequent forgetfulness, a handicap in everyday living requiring the subject to use <i>aides-mémoire</i> , perceptual distortion, possibly confabulation, difficulty in mastering new tasks, problems with recall	10 to 60%
Total or partial loss of didactically acquired knowledge: <i>Ratings for this should be assessed using the same scale as for memory disorders.</i>	

4) Minor cognitive disorders

Where there is no true frontal syndrome or isolated impairment of a cognitive function, certain cranial traumas of varying severity may give rise to objectively measurable symptoms which constitute a syndrome different from postconcussion syndrome, with:

Short attention span , slowness of thought, memorisation difficulty, rapid mental tiredness, intolerance to noise, mood swings, lasting longer than 2 years	5 to 10%
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5) Dementia

Trauma has not been proved to trigger dementia. Alzheimer's disease and senile dementia are never the result of trauma.

c) Mixed cognitive and sensorimotor deficits

These mixed deficits are typical sequelae of severe cranial trauma. In most cases they combine frontal dysfunctions with cognitive deficits, behavioural disturbances, pyramidal and/or cerebellar syndromes or sensory disturbances (hemianopsia, oculomotor paralysis, etc.) consistent with the lesions visualised by medical imaging

These associations produce clinical pictures which differ from one subject to another, to the point where one cannot suggest precise ratings in the way one can for fully personalised sequelae. These deficits will be assessed on an overall basis.

It is possible, however, in the context of medico-legal assessment, to identify several levels of severity in relation to the overall deficit.

Loss of all useful voluntary activity , loss of all identifiable relational abilities	100%
Major sensorimotor deficits seriously limiting independence, in conjunction with cognitive deficits incompatible with a reasonable relational life	85 to 95%
Major cognitive disorders comprising primarily lack of inhibition and severe behavioural disorders which compromise all social interactions, with sensorimotor deficits compatible with independence in the essential actions of everyday living	60 to 85%
Cognitive disorders in conjunction with permanent disturbance of attention and memory, relative or total loss of initiative and/or self-criticism, inability to manage complex situations, with sensorimotor deficits which are patent but compatible with independence in the actions of everyday living	40 to 60%
Cognitive disorders which combine obvious slowness of thought, patent memory deficit, difficulty in grasping complex ideas with minor sensorimotor deficits	20 to 40%

d) Epilepsy

One cannot suggest a disability rating until cranioencephalic trauma and epileptic seizures have been confirmed, and until the necessary time has elapsed to stabilise the condition's spontaneous progression and render the patient suitable for treatment.

1) Epilepsy with loss of consciousness

(Generalised epilepsy and complex partial epilepsy)

Epilepsy which is not controllable despite appropriate drug treatment and followed by established, almost daily seizures	35 to 70%
Epilepsy which is hard to control , with frequent seizures (several a month), and secondary effects from treatment	15 to 35%
Epilepsy which is well controlled by treatment which is well tolerated	10 to 15%

Epilepsy without loss of consciousness

Epilepsy which is partial and simple, authenticated as such by type and frequency of seizures and the secondary effects of treatment	10 to 30%
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Isolated EEG abnormalities, in the absence of established seizures, do not allow a diagnosis of post-traumatic epilepsy to be postulated

e) Postconcussion syndrome

Symptoms reported but not confirmed objectively following an established loss of consciousness	2%
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f) Deafferent pain:

This is pain linked to a lesion of the peripheral nervous system, which is felt without any nociceptive stimulation and may be one of several clinical types:

anaesthesia dolorosa, severe acute pain, hyperpathia (e.g phantom limb pain or trigeminal neuralgia).

These are types of 'exceptional pain' which are not part of the customary post-traumatic picture and so are not included in the disability ratings. They are a secondary form of damage.

Nevertheless there would seem to be a case for assessing them by increasing the disability rating for the deficit concerned by a further

5 to 10%.

PSYCHIATRY

(By reference to ICD-X and DSM-IV)

a) Persistent mood disorders

In the case of post-traumatic physical lesions requiring complex and protracted treatment with severe sequelae, there may be permanent mental suffering in the form of persistent mood disorders (*depressive state*) :

Frequent medical monitoring by a specialist, major drug treatment required with or without hospitalisation	10 to 20%
Regular medical monitoring by a specialist with sporadic specific drug treatment	3 to 10%
Necessitating medical monitoring at irregular intervals with intermittent treatment	up to 3%

b) Traumatic neurosis (post-traumatic stress syndrome, fright neurosis)

These follow mental symptoms triggered by the sudden, unexpected and brutal occurrence of a traumatic event with which the individual is unable to cope.

The stress factor must be intense and/or protracted.

The event must have been memorised.

The body of symptoms includes phobic anxiety, avoidance behaviour, obsessive-compulsive disorder and personality change. Even if treated very early, this cannot be assessed earlier than two years or so after the event.

Full-blown phobia syndrome	12 to 20%
Phobic anxiety with panic attacks , avoidance behaviour and obsessive-compulsive disorder	8 to 12%
Phobic anxiety symptoms with avoidance behaviour and obsessive-compulsive disorder	3 to 8%
Minor phobic anxiety symptoms	up to 3%

c) Psychotic disorders

These are not considered further in the Scale since they have hardly ever been shown to be the result of trauma.

C) SENSORIMOTOR DEFICITS

Damage to the nervous system entails paralysis (total lesion) or paresis. It must be assessed in terms of its objectively measured clinical and technical repercussions

a) Face

Paralysis of the trigeminal nerve <ul style="list-style-type: none"> • unilateral • bilateral 	15% 30%
Paralysis of the facial nerve <ul style="list-style-type: none"> • unilateral • bilateral 	20% 45%
Paralysis of the glossopharyngeal nerve <ul style="list-style-type: none"> • unilateral 	8%
Paralysis of the hypoglossal nerve <ul style="list-style-type: none"> • unilateral 	10%

b) Upper limb

	D	ND
Total paralysis (complete lesion of the brachial plexus)	65%	60%
Paralysis of the median-ulnar nerve	45%	40%
Paralysis of the radial nerve <ul style="list-style-type: none"> • above the tricipital branch • below the tricipital branch 	40% 30%	35% 25%
Paralysis of the median nerve <ul style="list-style-type: none"> • arm • wrist 	35% 25%	30% 20%
Paralysis of the ulnar nerve	20%	15%
Paralysis of the circumflex nerve	15%	12%
Paralysis of the musculocutaneous nerve	10%	8%

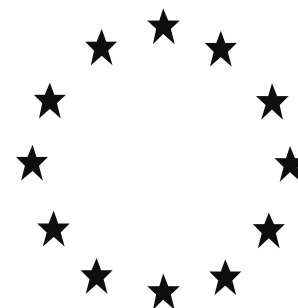
Given their implications for the upper limb the following impairments have been included in this chapter:

	D	ND
Paralysis of the spinal nerve	12%	10%
Paralysis of the superior thoracic nerve	5%	4%

c) Lower limb

Total paralysis of the sciatic nerve (complete lesion) <ul style="list-style-type: none">• high truncal form (with paralysis of the gluteal nerves)• low form, below the knee	45% 35%
Paralysis of the femoral nerve	35%
Paralysis of the fibular nerve	22%
Paralysis of the tibial nerve	22%
Paralysis of the obturator nerve	5%

II. SENSORY SYSTEM and STOMATOLOGY



II. SENSORY SYSTEM AND STOMATOLOGY

1 - OPHTHALMOLOGY

Situations not described are assessed by comparison with clinical situations which are described and quantified.

A) VISUAL ACUITY

a) Total loss of vision

Loss of vision in both eyes (blindness)	85%
Loss of vision in one eye	25%

b) Loss of visual acuity in both eyes, distance and near vision

	10/10	9/10	8/10	7/10	6/10	5/10	4/10	3/10	2/10	1/10	1/20	<1/20	Blindness
10/10	0	0	0	1	2	3	4	7	12	16	20	23	25
9/10	0	0	0	2	3	4	5	8	14	18	21	24	26
8/10	0	0	0	3	4	5	6	9	15	20	23	25	28
7/10	1	2	3	4	5	6	7	10	16	22	25	28	30

6/10	2	3	4	5	6	7	9	12	18	25	29	32	35
5/10	3	4	5	6	7	8	10	15	20	30	33	35	40
4/10	4	5	6	7	9	10	11	18	23	35	38	40	45
3/10	7	8	9	10	12	15	18	20	30	40	45	50	55
2/10	12	14	15	16	18	20	23	30	40	50	55	60	65
1/10	16	18	20	22	25	30	35	40	50	65	68	70	78
1/20	20	21	23	25	29	33	38	45	55	68	75	78	80
<1/20	23	24	25	28	32	35	40	50	60	70	78	80	82
Blindness	25	26	28	30	35	40	45	55	65	78	80	82	85

Table I: distance vision

	P 1.5*	P2	P3	P4	P5	P6	P8	P10	P14	P20	< P20	Blindness
P 1.5	0	0	2	3	6	8	10	13	16	20	23	25
P 2	0	0	4	5	8	10	14	16	18	22	25	28
P 3	2	4	8	9	12	16	20	22	25	28	32	35
P 4	3	5	9	11	15	20	25	27	30	36	40	42
P 5	6	8	12	15	20	26	30	33	36	42	46	50
P 6	8	10	16	20	26	30	32	37	42	46	50	55
P 8	10	14	20	25	30	32	40	46	52	58	62	65
P 10	13	16	22	27	33	37	46	50	58	64	67	70
P 14	16	18	25	30	36	42	52	58	65	70	72	76
P 20	20	22	28	36	42	46	58	64	70	75	78	80
< P 20	23	25	32	40	46	50	62	67	72	78	80	82
Blindness	25	28	35	42	50	55	65	70	76	80	82	85

Table II: near vision.

Table II should be used only where there is sizeable distortion between close and distance vision. In that case calculate the arithmetical mean of the 2 ratings.

**NB. P in this table refers to the (French) Parinaud scale*

B) VISUAL FIELD

Hemianopsia <ul style="list-style-type: none"> depending on type, extent and whether or not central vision is impaired 	up to 85%
Quadranopsia <ul style="list-style-type: none"> depending on type 	up to 30%
Central scotoma <ul style="list-style-type: none"> bilateral 	up to 70%

<ul style="list-style-type: none"> • unilateral 	up to 20%
Juxta-central or paracentral scotoma <ul style="list-style-type: none"> • depending on whether it is uni- or bilateral with visual acuity preserved 	up to 15%

C) EYE MOVEMENT

Diplopia <ul style="list-style-type: none"> • depending on direction of gaze, whether or not the condition is permanent, whether or not one eye needs to be covered at all times 	up to 25%
Oculomotor paralysis <ul style="list-style-type: none"> • depending on type 	up to 15%
Intrinsic movement <ul style="list-style-type: none"> • depending on type (maximum total aniridia) 	up to 10%
Heterophoria; total paralysis of convergence	5%

D) LENS

Loss (aphakia) corrected by spectacles or contact lenses <ul style="list-style-type: none"> • bilateral • unilateral <p><i>To which should be added the rating for the corrected loss of visual acuity, without exceeding 25% for a unilateral lesion and 85% if both eyes are affected.</i></p> Loss corrected by a lens implant (pseudophakia) : <ul style="list-style-type: none"> • <i>add 5% for each pseudophakic eye to the ratings for loss of visual acuity</i> 	20% 10%
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E) ADNEXA OF THE EYE

Depends on the impairment, the most serious being ptosis with campimetric deficit and bilateral alacrimia	up to 10%
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2 - ENT

Situations not described are assessed by comparison with clinical situations which are described and quantified.

A) HEARING

a) Auditory acuity

1) Total deafness

Bilateral	60%
Unilateral	14%

2) Partial deafness

Assessment is in 2 stages:

- **Mean hearing loss**

This is assessed by reference to the air conduction tonal deficit measured in decibels at 500, 1000, 2000, and 4000 hertz, applying weightings of 2, 4, 3 and 1 respectively. The sum is divided by 10.

Refer to the table below.

Mean hearing loss in dB	0 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 +
0 - 19	0	2	4	6	8	10	12	14
20 - 29	2	4	6	8	10	12	14	18
30 - 39	4	6	8	10	12	15	20	25
40 - 49	6	8	10	12	15	20	25	30
50 - 59	8	10	12	15	20	25	30	35
60 - 69	10	12	15	20	25	30	40	45
70 - 79	12	14	20	25	30	40	50	55
80 +	14	18	25	30	35	45	55	60

- **Auditory distortion**

Assessment must compare this crude rating with the results of speech audiometry to assess any auditory distortions (recruitment in particular) which makes the functional impairment worse.

The table below suggests increased ratings which might be considered in the light of the results of pure tone threshold audiometry:

% discrimination	100%	90%	80%	70%	60%	< 50%
100%	0	0	1	2	3	4
90%	0	0	1	2	3	4
80%	1	1	2	3	4	5
70%	2	2	3	4	5	6
60%	3	3	4	5	6	7
< 50%	4	4	5	6	7	8

Where a hearing aid is worn, the improvement will be determined by comparing the auditory curves obtained with and without the hearing aid in place; it enables the rating to be reduced, but account must be taken of the nuisance value of the prosthesis, especially in a noisy environment.

b) Isolated tinnitus

If confirmed as imputable to trauma	up to 3%
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B) BALANCE

Bilateral vestibular impairment, with objectively confirmed destruction, depending on severity	10 to 25%
Unilateral vestibular impairment	4 to 10%
Benign paroxysmal vertigo	up to 4%

C) NASAL BREATHING

Untreatable obstruction <ul style="list-style-type: none"> • bilateral • unilateral 	up to 8% up to 3%
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D) OLFACTORY SENSE including altered sense of taste

Anosmia	8%
Hyposmia	up to 3%

E) SPEECH

Aphonia	30%
Isolated dysphonia	up to 10%

3 - STOMATOLOGY

Situations not described are assessed by comparison with clinical situations which are described and quantified.

For a removable prosthesis reduce by 1/2; for a fixed prosthesis reduce by 3/4.

Where an implant is fitted there is deemed to be no disability.

Loss of all teeth where it is clear that prosthetic replacement is not possible <i>bearing in mind the implications for general health</i>	28%
Loss of a tooth, prosthetic replacement not possible <ul style="list-style-type: none">• incisor or canine• premolar or molar	1% 1.5%
Mandibular dysfunction <ul style="list-style-type: none">• mouth can open no wider than 10 mm• mouth can open no wider than 10 to 30 mm	25 to 28% 5 to 25%
Post-traumatic misalignment of teeth, <i>depending on its effect on the ability to chew</i>	2 to 10%
Amputation of the mobile part of the tongue, <i>bearing in mind its effect on speech, chewing and swallowing depending on the severity of dysfunction.</i>	3 to 30%

III. OSTEOARTICULAR SYSTEM



III – OSTEOARTICULAR SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

In the case of a joint or the limb itself, the overall rating is not the sum of the separate ratings but the result of their synergy, and the sum of the ratings for ankylosis of all the joints of a limb in a good position may not be higher than the value for total anatomical or functional loss of the limb.

Ratings justified by very severe stiffness not systematically provided for should be based on the rating for ankylosis of the relevant joint.

As regards endoprostheses for the major joints, it must be acknowledged that none of them restores proprioception and all of them impose certain restrictions on the lifestyle of the person concerned. Consequently, the presence of an endoprosthesis justifies a rating in principle of 5%.

Where the objective functional result is not satisfactory, these inconveniences in principle of the endoprosthesis are automatically included with those of the functional deficit, and this additional rating is not then justified.

A) UPPER LIMB

(excluding hand and fingers)

a) Amputations

Current possibilities for prosthetic replacement of the upper limbs do not generally speaking restore true function to the patient, since he cannot regain sensation. Where there is an improvement, the expert will take specific account of this and make a reasonable reduction in the rating suggested below

	D	ND
Total amputation of upper limb	65%	60%
Amputation of arm (shoulder mobile)	60%	55%
Amputation of forearm	50%	45%

b) Ankylosis and stiffness

1) Shoulder

There are 6 pure shoulder movements which, together, enable the joint to function. Each of these movements has its own relative importance in the actions of everyday living

The 3 essential movements are anterior elevation, abduction and internal rotation followed by external rotation, retropulsion and adduction. Impairments of retropulsion and adduction justify ratings so minimal that they are not included in the table below. They serve to weight the rating calculated for limitations of the other movements.

- **Ankylosis**

	D	ND
Arthrodesis or ankylosis in functional position <ul style="list-style-type: none"> • shoulder blade fixed • shoulder blade mobile 	30% 25%	25% 20%

- **Stiffness**

	D	ND
Elevation and abduction limited to 60° <ul style="list-style-type: none"> • with total loss of rotation • other movements fully possible 	22% 18%	20% 16%
Elevation and abduction limited to 90° <ul style="list-style-type: none"> • with total loss of rotation • other movements fully possible 	16% 10%	14% 8%
Elevation and abduction limited to 130° <ul style="list-style-type: none"> • other movements fully possible 	3%	2%
Isolated loss of internal rotation	6%	5%
Isolated loss of external rotation	3%	2%

2) Elbow

Only mobility between 20 and 120 degrees of flexion is of any practical use. Movements outside this useful range have only very minimal relevance for everyday life.

Thus the ratings below apply only to deficits within this range.

The expert will take account of the extension deficit and flexion deficit, the ratings for these being necessarily considered together though not added together. The rating for any pronosupination deficit may be added.

- **Ankylosis**

	D	ND
Arthrodesis or ankylosis in functional position <ul style="list-style-type: none"> • pronosupination preserved • pronosupination lost 	24% 34%	20% 30%

- **Stiffness**

	D	ND
Full flexion, and extension <ul style="list-style-type: none"> • limited beyond 90° • limited to 90° • limited to 20° 	15% 12% 2%	12% 10% 1%
Full extension, and flexion <ul style="list-style-type: none"> • up to 120° • up to 90° • beyond 	2% 12% 15%	1 % 10% 12%

3) Isolated impairment of pronosupination

- **Ankylosis**

	D	ND
Ankylosis in functional position	10%	8%

- **Stiffness**

	D	ND
Stiffness in pronation range	0 to 6%	0 to 5%
Stiffness in supination range	0 to 4%	0 to 3%

4) Wrist

The useful range extends from 0 to 45 degrees for both flexion and extension. Movements outside this useful range have only very minimal relevance for everyday life. The same is true of radial deviation.

- **Ankylosis**

	D	ND
Arthrodesis or ankylosis in functional position <ul style="list-style-type: none"> • pronosupination preserved • pronosupination lost 	10% 20%	8% 16%

- **Stiffness**

	D	ND
Stiffness in useful range <ul style="list-style-type: none"> • flexion deficit • extension deficit 	0 to 4% 0 to 6%	0 to 3% 0 to 5%
Loss of ulnar deviation	1.5%	1%

B HAND

The essential function of the hand is prehension, determined by the efficient performance of grasping and gripping movements. These require the possession of fingers of adequate length, mobility and sensitivity.

The expert will primarily need to make an analytical examination of the hand.

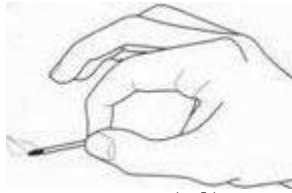
He will then have to check that his findings on examination are borne out by the patient's ability to perform the six basic grasping and gripping actions (see figure).

Any discrepancy should prompt careful investigation of its causes and a possible adjustment to the disability rating envisaged, the absolute limit being the loss of value of the fingers concerned.

PRINCIPAL GRASPING AND GRIPPING ACTIONS



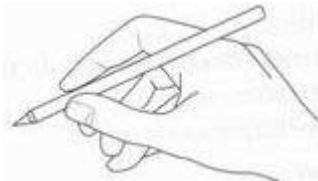
Power grip, palmar



Precision grip, (sub)terminal opposition



Precision grip, subterminal-lateral



Dynamic tripod



Hook grip

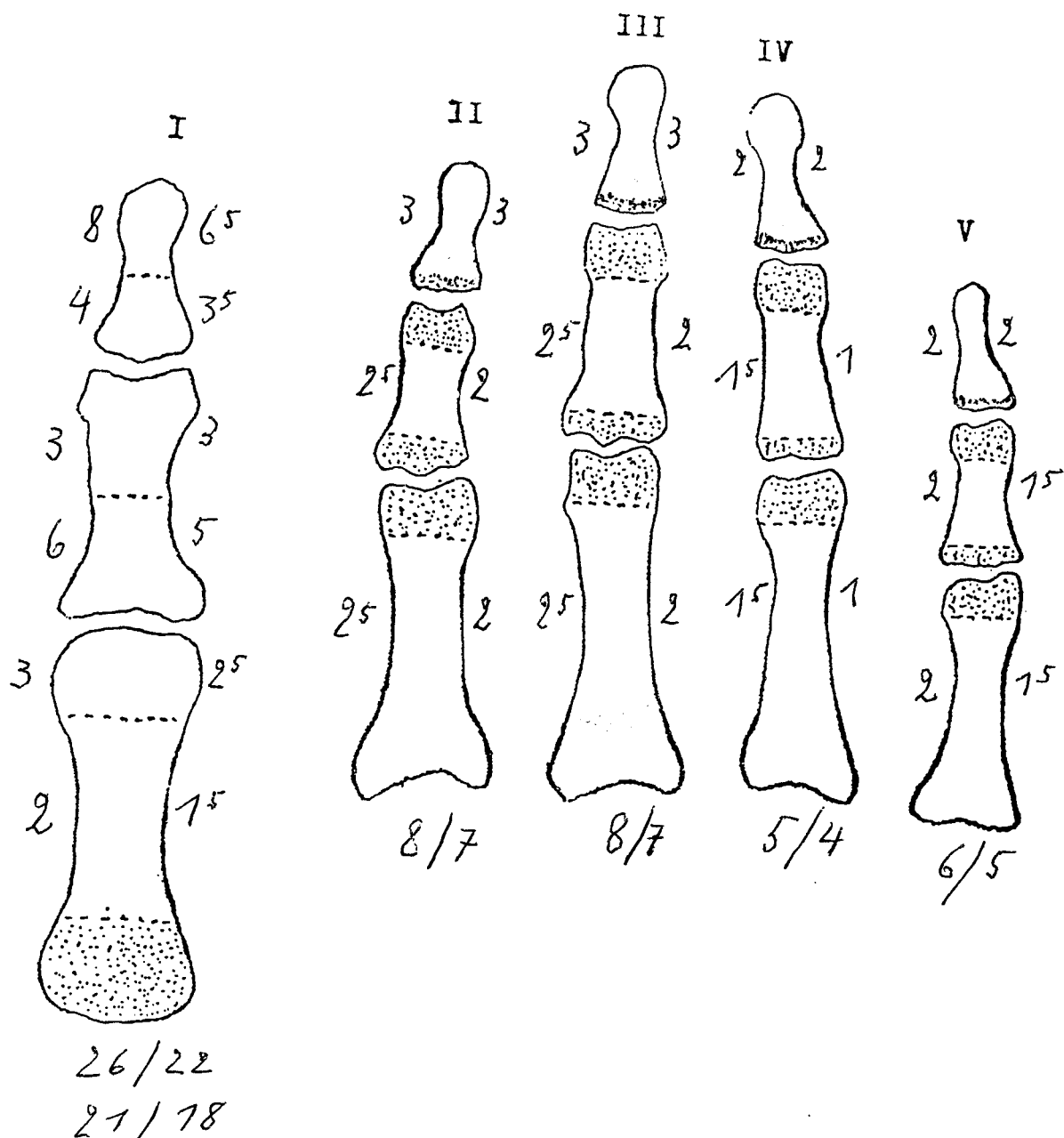


Power ball grip

a) Amputations

1) Total amputation of the hand

	D	ND
Total amputation of the hand	50%	45%



2) Amputation of the fingers

In this diagram:

- the dotted areas are valued at nil
- the rating attributed to each segment covers the whole of that segment
- partial loss of a segment is calculated pro rata as a proportion of the rating for total loss
- the ratings suggested take account of the minor changes in sensitivity, blood supply and shape which the doctor knows to be usual with finger amputations

- Amputation of the **thumb (and its metacarpal)** or long fingers: *see diagram of hand*
- Amputation of a **long finger (total or partial)**: see rating on diagram.
- Amputation of **several long fingers** (combined losses): *simply adding together the calculated ratings for single fingers does not take account of the interaction of the long fingers. This synergy is different depending on the number of fingers involved:*
 - *loss of 2 long fingers: increase the simple total by 45% of the rating calculated*
 - *loss of 3 long fingers: increase the simple total by 65% of the rating calculated*
 - *loss of 4 long fingers: increase the simple total by 45% of the rating calculated*
- Amputation of the **thumb**:

	D	ND
loss of MC + P1 + P2	26%	22%
loss of P1 + P2	21%	18%
loss of P2	12%	10%

- Amputation of the thumb and one or more of the long fingers: here the term ‘thumb’ refers only to P1 + P2.

Simply adding together the ratings for the thumb and all the long fingers lost (calculation of this latter rating takes account of the interaction of the long fingers) would give an overall rating which was too high. The value attributed to the thumb in the diagram of the hand only applies if the long fingers are intact. If they are not, the thumb loses part of its usefulness in the synergistic action of all 5 digits.

Thus, the following reducing factors should be applied to the rating arrived at by simply adding together the rating for the thumb + the rating for the long fingers increased for their synergistic action:

- *loss of thumb and 1 finger: 0% (impairment too minor to count in the calculation)*
- *loss of thumb and 2 fingers: - 5%*
- *loss of thumb and 3 fingers: -10%*
- *loss of thumb and 4 fingers: -20%*

Loss of the first metacarpal as well will have little effect on the final rating: the first metacarpal on its own is of little value.

The effect on the final rating for the other metacarpals is modest but variable since, depending on the case, resection of them will be desirable or slightly counterproductive.

b) Ankylosis, arthrodesis and stiffness

Where there is combined impairment of several fingers the proposed factors should be applied to take account first of the synergy between the long fingers and, second, of impairment affecting both the thumb and one or more of the long fingers: see earlier text.

1) Ankylosis

By convention the trapezometacarpal joint of the thumb is called A0; for all the fingers A1 is the metacarpophalangeal joint, A2 the proximal interphalangeal joint, and A3 the distal interphalangeal joint.

The functional position for the long fingers is flexion of 20 to 30°.

The functional position for the thumb is abduction and antepulsion of A0 and slight flexion of A1 and A2.

- Ankylosis of the **thumb in the functional position**

Ankylosis of A0, A1 and A2 gives a rating of less than 75% of the value of the finger used for ankylosis of the long fingers, taking into account the special function of the thumb. Even with this ankylosis a degree of opposing force can still be exerted.

	D	ND
A0 + A1 + A2	16%	14%
A0	8%	7%
A1	4%	3.5%
A2	4%	3.5%
A1 + A2	8%	7%

- Ankylosis of **all the joints of a long finger**

In the *functional position*: equivalent to 75% of the value of the finger's loss, given that sensation is retained and limited use of the finger is still possible

	D	ND
Index finger	6%	5%
Middle finger	6%	5%
Ring finger	4%	3%
Little finger	4.5%	4%

In a *poor position*

overflexed	D	ND
Index	8%	7%
Middle finger	8%	7%
Ring finger	5%	4%
Little finger	6%	5%

overextended	D	ND
Index finger	7%	6%
Middle finger	7%	6%
Ring finger	4.5%	3.5%
Little finger	5%	4%

- Ankylosis of **one or more joints of a long finger**

The expert will look at the rating for total ankylosis of the finger concerned less 1/3 or 2/3.

2) Stiffness

The rating given for stiffness is a proportion of the rating for ankylosis, taking into account the normal range of mobility of each joint.

The *normal range of mobility for the long fingers is:*

- *A1 and A2: index and middle finger: 20 to 80°; ring finger and little finger: 30 to 90°*
- *A3: 20 to 70°*

The normal range of mobility for the joints of the thumb lies on either side of their functional position.

c) Disorders of palmar sensitivity

Disordered sensitivity of the back of the hand has no implications for function, so it does not justify a disability rating

The ratings proposed cover slight paraesthesia and discrete abnormalities of shape which the doctor knows to be normal in minor neuromas following resection of a nerve.

Where several fingers are involved, the factors for synergy of the long fingers and for loss of both thumb and one or more of the long fingers should be applied: see earlier text.

1) Anaesthesia: the rating given is 75% of the rating for anatomical loss of the segment(s) of the finger(s) in question.

2) Hypoaesthesia: the rating given is 50% to 75% of the rating for anatomical loss of the segment(s) of the finger(s) in question, depending on the severity and localised extent of hypoaesthesia and the finger affected (ability to grip).

B) LOWER LIMB

a) Amputations

Amputation of a lower limb, unless it is the foot, renders the patient unable to walk or stand. The suggested ratings are for a patient correctly fitted with a prosthesis. If the prosthesis is not all that satisfactory the expert will assess the rating on the basis of how well it is tolerated and how effective it is. The rating may not be higher than for amputation of the whole limb.

Disarticulation of the hip or high-level transfemoral amputation where a prosthesis cannot be fitted	65%
Unilateral disarticulation of the hip or high-level transfemoral amputation without ischial support	60%
Femoral amputation	50%
Disarticulation of the knee	40%
Amputation of the leg	30%
Tibiotarsal amputation	25%
Mid- or transmetatarsal amputation	20%
Amputation of the 5 toes and 1 st metatarsal	12%
Amputation of the big toe and 1 st metatarsal	10%
Amputation of both phalanges of the big toe	6%

b) Ankylosis and stiffness

1) Hip

Flexion : 90° allows most actions of everyday living; 70° allows the patient to sit and negotiate stairs; 30° allows him to walk.

Abduction : 20° allows virtually all actions of everyday living

Adduction : of minimal practical importance.

External rotation: only the first 30° range is useful.

Internal rotation: 10° is enough for most actions of everyday living

Extension : 20° is used in walking and negotiating stairs.

Pain is an essential factor determining use of the hip in everyday life (walking and standing): the suggested ratings take account of this.

- **Ankylosis**

Hip <ul style="list-style-type: none">• in good position	30%
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- **Stiffness**

Extreme stiffness of several movements

with accompanying signs (radiological signs, amyotrophy, etc.), this is a more severe condition than ankylosis	up to 40%
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Assuming full movement otherwise

Total loss of flexion	17%
Flexion	
• limited to 30°	13%
• limited to 70°	7%
• limited to 90°	4%
Total loss of extension	2%
Permanent irreducible flexion of 20°	4%
Total loss of abduction	6%
Total loss of adduction	1%
Total loss of external rotation	3%
Total loss of internal rotation	1%

2) Knee

Flexion : 90° allows half and, above all, the most important actions of everyday living (walking sitting down, using stairs); 110° allows 3/4 of everyday actions and 135° allows all of them.

Extension : an extension deficit of less than 10° is compatible with 3/4 of everyday actions.

- **Ankylosis**

Knee	
• in good position	25%

- **Stiffness**

Flexion <ul style="list-style-type: none"> • limited to 30° • limited to 50° • limited to 70° • limited to 90° • limited to 110° 	20% 15% 10% 5% 2%
Extension deficit <ul style="list-style-type: none"> • less than 10° • 10° • 15° • 20° • 30° 	0% 3% 5% 10% 20%

- **Laxity (no prosthesis fitted)**

Lateral <ul style="list-style-type: none"> • less than 10° • more than 10° 	0 to 5% 5 to 10%
Anterior <ul style="list-style-type: none"> • isolated • rotational 	2 to 5% 5 to 10%
Posterior <ul style="list-style-type: none"> • isolated • rotational 	3 to 7% 7 to 12%
Complex rotational	10 to 17%

- **Axial deviation**

Genu valgum <ul style="list-style-type: none"> • less than 10° • 10 to 20° • more than 20° 	0 to 3% 3 to 10% 10 to 20%
Genu varum <ul style="list-style-type: none"> • less than 10° 	0 to 4% 4 to 10%

<ul style="list-style-type: none"> • 10 to 20° • more than 20° 	10 to 20%
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- **Femoropatellar syndromes**

Femoropatellar syndromes	0 to 8%
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- **Sequelae of meniscus lesions**

Sequelae of meniscus lesions	0 to 5%
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3) Ankle and foot

- **Tibiotalar joint**

With 20° plantar flexion one can perform over half the actions of everyday living; with 35° one can perform all of them.

With 10° dorsiflexion one can perform virtually all everyday actions.

Loss of a few degrees of dorsiflexion is more of a handicap than an equivalent loss of plantar flexion given the restricted range of dorsiflexion.

- **Ankylosis**

<ul style="list-style-type: none"> • In functional position with forefoot supple 	10%
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- **Stiffness**

Total loss of plantar flexion	5%
Total loss of dorsiflexion	5%
Plantar flexion	
<ul style="list-style-type: none"> • from 0 to 10° 	5%
	4%

<ul style="list-style-type: none"> • from 0 to 20° • from 0 to 30° 	2%
Dorsiflexion <ul style="list-style-type: none"> • from 0 to 5° • from 0 to 10° • from 0 to 15° 	5% 3% 1%
Irreducible talipes equinus	up to %

○ **Laxity**

Laxity	2 to 6%
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• **Subtalar joint**

Valgus: with 5° one can perform virtually all actions of everyday living

Varus: with 5° one can perform over half the actions of everyday living and with 15° one can perform all of them.

Loss of varus carries a higher disability rating than loss of valgus because varus ankylosis is less well tolerated than valgus ankylosis.

○ **Ankylosis**

• in good position	7%
• varus	9%
• valgus	8%

○ **Stiffness**

Limitation by half	3%
Limitation by one third	2%

• **Midtarsal joint (Chopart's joint) and tarsometatarsal joint (Lisfranc's joint)**

○ **Ankylosis**

Midtarsal (Chopart)	2%
Tarsometatarsal (Lisfranc)	4%

○ **Stiffness**

Limitation by half	3%
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• **Metatarsophalangeal joints - toes**

○ **Ankylosis**

Metatarsophalangeal of the big toe, depending on position	2 to 3%
Ankylosis of toes 2 to 5, in good position	0 to 2%

○ **Stiffness**

The expert will set the rating for stiffness on the basis of the suggested ratings for ankylosis.

4) Combined ankylosis

Combined ankylosis	
• tibiotalar and subtalar joints, midtarsal joint and forefoot supple	17%
• tibiotalar and subtalar joints with reduced mobility of the midtarsal joint and forefoot	20%
• subtalar and midtarsal joints in good position, other joints free	9%
• tibiotalar, subtalar and midtarsal joints, forefoot supple	19%
• tibiotalar, subtalar, midtarsal and tarsometatarsal joints	23%
• idem with ankylosis of the toes	25%

5) Uncompensated shortening

Up to 5 cm	8%
Up to 4 cm	6%
Up to 2 cm	2%
Up to 1 cm	0%

D) SPINE

Situations not described are assessed by comparison with clinical situations which are described and quantified.

a) Cervical spine

1) Without neurological complication

- **Without documented lesions of bones, discs or ligaments**

Intermittent pain triggered by precise causes which are always the same, requiring pain relieving and/or anti-inflammatory drugs on demand, with minimal reduction of movement	up to 3%
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- **With documented lesions of bones, discs or ligaments**

Very frequent pain with permanent functional impairment requiring caution in all movements, established vertigo and associated posterior headache, <ul style="list-style-type: none">• with multi-stage, very extreme stiffness, depending on number of levels• some remaining neck movement	15 to 25% 10 to 15%
Frequent pain with clinically confirmed limitation of the range of motion, real but intermittent need for drug treatment	3 to 10%
Arthrodesis or ankylosis without accompanying symptoms, depending on number of levels	3 to 10%

2) With neurological or vascular complications

See relevant chapter (nervous system)

b) Thoracic spine, lumbar spine and lumbosacral junction

1) Without neurological complication

- **Without documented lesions of bones, discs or ligaments**

Intermittent pain triggered by precise causes, requiring appropriate drug treatment on demand and the avoidance of major and/or protracted effort, associated with discrete segmental stiffness	up to 3%
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- **With documented lesions of bones, discs or ligaments**

<p><i>Thoracic spine</i></p> <ul style="list-style-type: none"> • active stiffness and pain in all movements and in all positions, requiring regular drug treatment • permanent discomfort with pain between the shoulderblades, problems with weight-bearing capacity, hollow back, loss of radiological thoracic kyphosis, drug treatment required 	<p>3 to 10%</p> <p>10 to 15%</p>
<p><i>Lumbar spine and thoracolumbar and lumbosacral junctions:</i></p> <ul style="list-style-type: none"> • active stiffness and discomfort or pain in all movements and in all positions, requiring regular drug treatment • very frequent pain with permanent discomfort requiring caution in all movements, with major segmental stiffness in movements, clinically confirmed limitation • exceptionally severe clinical and radiological findings 	<p>3 to 10%</p> <p>10 to 15%</p> <p>up to 25%</p>

2) With neurological complication

See relevant chapter (Neurology)

c) Coccyx

Coccydynia	up to 3%
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E) Pelvis

Post-fracture pain in one ischiopubic ramus	up to%
Pain and/or instability in the pubic symphysis	2 to 5%
Pain after dislocation or fracture of the sacroiliac joint	2 to 5%
Associated pain and instability in the pubic symphysis and sacroiliac joint <ul style="list-style-type: none">• without reduction in weight-bearing capacity of pelvis or gait impairment• with reduction in weight-bearing capacity of pelvis and gait impairment	5 to 8% 8 to 18%



IV. CARDIORESPIRATORY SYSTEM



IV – CARDIORESPIRATORY SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

I - HEART

The expert will refer to the classification below, which is modelled on that of the New York Heart Association (NYHA), taking account of the functional symptoms reported by the patient, his clinical examination and a range of complementary tests (ECG, Doppler, exercise tolerance test, transoesophageal echocardiography, catheterisation, etc.).

Of all the technical data, the ejection fraction is the most important for objectively quantifying sequelae.

The expert should also take account of the need for medical drugs and the consequent need to monitor the patient.

a) Cardiological sequelae

<p>Functional symptoms even at rest confirmed by clinical data (effort of getting undressed, clinical examination) and paraclinical data. Major drug treatment and frequent hospitalisation required</p> <p>Ejection fraction < 20%</p>	55% +
<p>Functional limitation on mild exertion with signs of myocardial incompetence (pulmonary oedema) or associated with peripheral vascular complications or complex arrhythmias. Serious drug treatment and close monitoring of the patient required</p> <p>Ejection fraction 20% to 25%</p>	45 to 55%
<p>Idem with significant drug requirement and/or in the event of associated arrhythmias</p> <p>Ejection fraction 25% to 30%</p>	40 to 45%
<p>Functional limitation hampering ordinary activity (walking quickly), clear worsening of echography or Doppler parameters. Intolerance of effort with exertional ECG abnormalities, drug treatment required.</p> <p>Ejection fraction 30% to 35%</p>	35 to 40%
<p>Patient reports functional limitation on ordinary exertion (2 stages), confirmed by exertional ECG or the existence of signs of myocardial dysfunction. Physical exertion contraindicated, and drug treatment required with close cardiological monitoring</p> <p>Ejection fraction 35% to 40%</p>	25 to 35%
<p>Patient reports functional limitation on patent (significant) exertion with signs of myocardial dysfunction (Doppler, catheterisation, etc.) with drug treatment and close monitoring required</p> <p>Ejection fraction 40% to 50%</p>	15 to 25%
<p>Patient reports functional limitation on substantial exertion (sport)</p>	8 to 15%

without signs of myocardial dysfunction or ischaemia, with drug treatment and regular monitoring required Ejection fraction 50% to 60%	
No functional limitation. Good tolerance of effort; depending on the case, drug treatment and/or regular monitoring required Ejection fraction > 60%	up to 8%

b) Transplant

The possibility of a transplant takes into account the fact that these patients need serious amounts of medical drugs and especially close monitoring

Depending on functional outcome and tolerance of immunosuppressants	25 to 30 %
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II) LUNGS

Whatever the origin of the lung damage, assessment must be based on the degree of chronic respiratory insufficiency, measured in terms of:

- severity of breathlessness, graded by reference to Sadoul's clinical scale of dyspnoea:

STAGE OR CLASS	DESCRIPTION
1	Dyspnoea on major exertion greater than in stage 2
2	Dyspnoea when walking up a gentle incline, walking quickly, or stage 1
3	Dyspnoea when walking normally on the level
4	Dyspnoea when walking slowly
5	Dyspnoea even on mild exertion

- clinical examination performed by a lung specialist
- complementary tests already performed or requested for the purposes of the insurance claim report. These tests must be non-invasive.

Examples include imaging, endoscopy, respiratory gas measurement, spirometry, lung function tests and blood tests such as FEV₁/FVC, MMEF, SaO₂, TLC, FVC, TLCO/AV, PaO₂, PaCO₂:

FVC: forced vital capacity; **TLC**: total lung capacity; **FEV₁**: forced expiratory volume in 1 second; **MMEF**: maximum mid-expiratory flow; **PaO₂**: arterial oxygen tension; **PaCO₂**: arterial carbon dioxide tension; **SaO₂**: arterial haemoglobin oxygen saturation; **TLCO/AV**: carbon monoxide transfer factor/alveolar volume.

a) Anatomical loss of all or part of a lung

Total loss	15%
Loss of one lobe	5%

These ratings may be added together with the disability ratings for any associated respiratory insufficiency.

b) Chronic respiratory insufficiency

Dyspnoea on the slightest exertion (getting undressed) with <ul style="list-style-type: none"> ▪ either FVC or TLC less than 50% ▪ or FEV₁ less than 40% ▪ or resting hypoxaemia (PaO₂) less than 60 mm Hg, with or without hypercapnoea (PaCO₂), possibly necessitating lengthy oxygen therapy (> 16 h/day) or tracheotomy or intermittent mechanical ventilation 	50% +
Dyspnoea whilst walking on the level to one's own pace, with <ul style="list-style-type: none"> ▪ either FVC or TLC between 50 and 60% ▪ or FEV₁ between 40 and 60% ▪ or resting hypoxaemia (PaO₂) between 60 and 70 mm Hg 	30 to 50%
Dyspnoea whilst walking normally on the level, with <ul style="list-style-type: none"> ▪ either FVC or TLC between 60 and 70% ▪ or FEV₁ between 60 and 70% ▪ or TLCO/AV less than 60% 	15 to 30%
Dyspnoea whilst walking quickly upstairs or up a gentle incline, with <ul style="list-style-type: none"> ▪ either FVC or TLC between 70 and 80% ▪ or FEV₁ between 70 and 80% ▪ or TLCO/AV between 60 and 70% 	5 to 15%
Dyspnoea on major exertion with minor deterioration of lung function test scores	2 to 5%

c) Persistent painful sequelae of thoracotomy

up to 5%

V. VASCULAR SYSTEM



V – VASCULAR SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

A. Sequelae affecting arteries, veins and lymph vessels

The rating will take account of any need for medical drugs and/or medical monitoring e.g. in the case of a prosthesis which does not in itself justify a disability rating

a) Arteries

<p>Lower limb</p> <ul style="list-style-type: none"> ▪ Discomfort on exertion (established intermittent claudication) ▪ Discomfort at rest (established spontaneous ischaemic pain) ▪ Idem with tissue necrosis which may be serious enough to warrant amputation 	<p>5 to 15% 15 to 25% 25% +</p>
<p>Upper limb <i>Depending on functional impairment (e.g. loss of strength, hypothermia, etc.)</i></p>	<p>5 to 10%</p>

b) Veins

Sequelae of manifest phlebitis, which must be assessed bearing in mind any pre-existing condition

Discomfort on walking for any length of time, permanent measurable oedema requiring the patient to wear support stockings at all times; recurrent stasis dermatitis and ulcers	10 to 15%
Discomfort on walking for any length of time, permanent measurable oedema requiring the patient to wear support stockings at all times; stasis dermatitis	4 to 10%

Feeling of 'heavy leg' with verifiable oedema in the evenings	up to 4%
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c) Lymph vessels (lymphoedema)

Upper limb	up to 10%
Lower limb	<i>see Veins above</i>

B. Total splenectomy

Drug treatment strictly required	15%
Asymptomatic	5%

VI. DIGESTIVE SYSTEM



VI- DIGESTIVE SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

A) PERMANENT CUTANEOUS OSTOMIES AND TOTAL INCONTINENCE

a) Ostomies with pouching system

Colostomy, ileostomy	30%
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b) Faecal incontinence

Uncontrollable	45%
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B) PROBLEMS COMMON TO VARIOUS IMPAIRMENTS OF THE DIGESTIVE SYSTEM

The rating includes that inherent in loss of the organ.

Full-blown malabsorption syndrome	60%
Necessitating frequent medical check-ups , constant treatment and adherence to a strict diet, with effects on the patient's general health	30%
Necessitating regular medical check-ups , virtually permanent treatment and adherence to a strict diet, with implications for the patient's social life	20%
Necessitating periodic medical check-ups , intermittent treatment and dietary precautions, without effects on the patient's general health	10%

C) HEPATITIS

a) Without cirrhosis

Ratings are based on the Metavir score which has the virtue of having been designed specifically for hepatitis.

This is based on 2 parameters, the activity score and the fibrosis score:

Activity score	Fibrosis score
A0 : none	F0 : no fibrosis
A1 : minimal	F1 : fibrosis, expansion of portal tracts without septa formation
A2 : moderate	F2 : enlargement of portal tracts with rare septa formation
A3 : marked	F3 : numerous septa without cirrhosis
	F4 : cirrhosis

The ratings proposed are thus as follows:

Persistent (chronic active) hepatitis	20%
Metavir score higher than A1 F1, lower than F4	10%
Metavir score A1 F1 or lower	5%

b) With cirrhosis (*i.e. Metavir score higher than F4*)

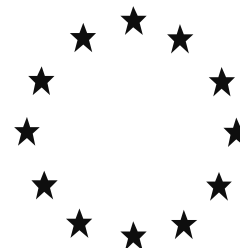
Ratings are based on the Child-Pugh scoring system:

<i>Group</i>	<i>A</i>	<i>B</i>	<i>C</i>
Serum bilirubin (µmol/l)	< 34.2	34.2 to 51.3	> 51.3
Serum albumin (g/l)	> 35	30 to 35	< 30
Ascites	Absent	Medically controlled	Poorly controlled
Neurological symptoms	Absent	Transient or mild	Hepatic coma
Nutritional status	Excellent	Good	Mediocre, loss of muscle mass

The ratings proposed are as follows:

Class 3 : advanced hepatic insufficiency Child-Pugh C	70% +
Class 2 : Child-Pugh B	40%
Class 1 : Child-Pugh A	20%

VII. URINARY SYSTEM



VII - URINARY SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

a) Loss of a kidney, not replaced, renal function normal or as before

Rating for loss of an internal organ, against the specific psychological and cultural background of the case	15%
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b) Renal insufficiency

Creatinine clearance less than 10 ml/min. Need for dialysis at a dialysis centre or at home; depending on complications	35 to 65%
Creatinine clearance between 10 and 30 ml/min. Deterioration in general health. Very strict diet and serious drug treatment required	25 to 35%
Creatinine clearance between 30 and 60 ml/min. Minimum BP less than 12. Asthenia, need for strict diet and medical treatment	15 to 25%
Creatinine clearance between 60 and 80 ml/min with BP 16/9 or less, depending on diet, deterioration in general health and treatments	5 to 15%

In the specific case where renal function has worsened in a patient who has lost one kidney, the rating for the anatomical loss may not be added, but the minimum proposed rating for deterioration in kidney function is 15%.

c) Transplantation

Depending on tolerance to treatment with corticosteroids and immunodepressants	10 to 20%
<i>If there is also renal insufficiency which is imputable, refer to the table above</i>	

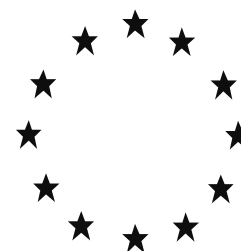
d) Incontinence

Uncontrollable	30%
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d) Ostomy

With pouching system	15%
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VIII. REPRODUCTIVE SYSTEM



VIII – REPRODUCTIVE SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

Ratings do not take account of any endocrine effects.

They do not include repercussions on sexual differentiation where the damage is sustained before puberty.

Some of these ratings reflect sociocultural attitudes to loss of the organ concerned.

I- FEMALES

a) Organ loss

Hysterectomy	6%
Ovariectomy <ul style="list-style-type: none"> • bilateral • unilateral 	12% 6%
Mastectomy <ul style="list-style-type: none"> • bilateral • unilateral 	25% 10%

b) Sterility

Definitive inability of all medical methods of intervention to assist procreation in a previously fertile subject; rating includes loss of organs	25%
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II- MALES

a) Organ loss

Orchidectomy	
• bilateral	15%
• unilateral	6%
Loss of the penis	40%

b) Sterility

In a previously fertile subject, the rating includes loss of the testicles	25%
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If the penis is also lost, the combined rating for organ loss and sterility is 45%.

IX. ENDOCRINE SYSTEM



IX. ENDOCRINE SYSTEM

Situations not described are assessed by comparison with clinical situations which are described and quantified.

Problems of imputability in this area are some of the most difficult. It is extremely rare, in the work of assessment, to see physical damage represented solely by an isolated endocrine deficit.

Here more than in any of the other chapters, decisions must be reached on the basis of clinical examinations and complementary tests done by a specialist.

Assessment will be based on suitability for treatment, monitoring of treatment and the efficacy of treatment.

a) Pituitary gland

Panhypopituitarism (represented by total functional deficit of the anterior and posterior pituitary), necessitating replacement therapy and regular clinical and biological monitoring, depending on the efficacy of treatment	20 to 45%
Diabetes insipidus , assessed in terms of the efficacy of medical drugs in controlling polyuria	5 to 20%

b) Thyroid gland

Hyperthyroidism , with deterioration in biological constants, tremor, exophthalmos without effects on vision.	5 to 8%
Idem, with repercussions on other organs and/or functions	8 to 30%
Hypothyroidism (exceptional after trauma)	up to 5%

c) Parathyroid glands

Hypoactive parathyroid gland , depends essentially on abnormal biomeasurements (blood calcium, blood phosphorus, parathyroid hormone) and the discomfort caused by persistent clinical signs	5 to 15%
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d) Pancreas – Diabetes

<p>Non-insulin-dependent diabetes</p> <p>This is never a direct result of trauma. Where imputability is established, depends on the nature of the clinical signs, need for monitoring and treatment</p>	5 to 10%
<p>Insulin-dependent diabetes</p> <p><i>Onset of this type of diabetes often poses problems of imputability, except where it is the result of major pancreatic lesions.</i> <i>The rating will be assessed in terms of the stability of the condition, its effects on the patient's social life and the need for medical drugs and monitoring</i></p> <ul style="list-style-type: none"> - Poorly controlled diabetes, with malaise and repercussions for general health, necessitating close biological monitoring - Well controlled diabetes using simple insulin treatment, depending on the need for monitoring <p><i>In the event of complications which leave permanent sequelae, refer to the specialist areas concerned.</i></p>	<p>20 to 40%</p> <p>15 to 20%</p>

e) Adrenal cortex

Insufficiency of the adrenal cortex: depends on the need for drug treatment and monitoring	10 to 25%
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f) Gonads

Depends on the outcome of replacement therapy	10 to 25%
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X. SKIN



X. DEEP BURNS OR PATHOLOGICAL SCARRING

Situations not described are assessed by comparison with clinical situations which are described and quantified.

The ratings suggested essentially take account of sequelae affecting the skin and do not include aesthetic consequences and restrictions on movement.

Depending on the percentage of the body surface affected by the lesions

Less than 10%	5%
10 to 20%	10%
20 to 60%	10 to 25%
More than 60%	25 to 50%

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EXPLANATORY STATEMENT

A. REASONS FOR SCALE-BASED ASSESSMENT

1. Today, as always in the past, the assessment of bodily injury and the compensation awarded for it is based in every Member State of the European Union on consensual social and legislative principles which reflect the thinking of European society.

Generally speaking, the principles are set out concisely in laws or codes, and the implementing rules are framed by case law and doctrine.

2. In the context of full reparation, under the common law of third-party liability, a distinction is made between financial and non-financial prejudice.

Financial prejudice, defined partly in medical terms and partly in terms of fitness for work, requires specific assessment to which the use of a scale is ill suited.

Non-financial prejudice is damage sustained outside any context of monetary relevance. On the purely personal level, it is an impairment of the habitual activities of everyday life, of that series of movements and actions performed by every man and woman from the moment they get up in the morning to the time they go to bed at night, irrespective of the job they do. This prejudice causes a reduction in the quality of their everyday life.

3. The effects which cause prejudice to individuals affect human beings in a sphere of activity which is roughly the same for everyone. The same effects thus have virtually identical repercussions on everyday life: it makes sense to assume that they can be assessed on the same basis. They lend themselves to scale-based assessment.

In practice the current system is satisfactory despite its imperfections and allows for assessment which is relatively reproducible because, whether overtly or not, it is scale-based.

4. Why do the experts in most EU Member States not make do with a simple description? Because the transposition of this description by the person deciding on compensation is in effect an interpretation. And any interpretation can mean alteration, especially where the description given by an expert in one country is used by the decision-maker in another country: it is dangerous to underestimate the problems of language and specialist terminology. It would thus seem a good idea to aim for synthesis and precision, rating specific sequelae by a percentage figure and an explanation: *'expertise means listening observing measuring understanding and then explaining so that others can understand'*.

The system of percentage ratings needs a set scale so that there can be equality and fairness: the same sequelae mean the same rating and the same compensation.

4. The most obvious deficiency of existing scales is that they are not scientifically designed: they are a fusion of rating accepted by the courts – 'conventional scales'.

But they have the virtue of evolving in line with the advances achieved in treatment, rehabilitation, imaging and measuring methods and our knowledge of the difficulties faced by victims of trauma.

Could a purely ‘scientific’ scale also take account, as existing national scales tacitly do, of sociocultural attitudes which are so inescapably important? These do not differ greatly from one EU country to another. But could the Europeans devise a scale acceptable to other civilisations, and vice versa?

B. NEED FOR A EUROPEAN SCALE

5. The European ambition is to maintain full compensation for financial damage and promote scale-based compensation for non-financial (personal) damage.
6. There is no point harmonising the method of financial compensation if loss of the same organs and same functions is not valued in the same way throughout the EU, if the same sequelae are not quantified in the same way.

If the same sequelae are to be assessed in a manner which can be reproduced by different experts, in different countries, and leading to the same conclusions, a single European Scale is the only option.

7. It would be unthinkable arbitrarily to impose the conventions of any one country when seeking to harmonise compensation and the process of assessment used to determine it. So harmonisation necessarily means that we must suggest solutions, none of which is unacceptable to any one of the players involved in the process of change, in the knowledge that none of these solutions will be entirely satisfactory to all players.
8. It was not practicable to have the European Scale drafted by a national body or university team: we needed to combine the applied knowledge drawn from use of the various national scales with a respect for features prompted by attitudes peculiar to specific societies. We thus chose a European body, in the hope of achieving consensus without destabilising a system which, notwithstanding its imperfections, does actually work at present. The body chosen was CEREDOC, the *Confédération Européenne d’Experts en Réparation et Evaluation du Dommage Corporel*, which brings together high-level academics and professionals from the various European countries. Its team sought the collaboration of leading specialists in the medical disciplines relevant to expert assessment in the settlement of insurance claims. It was also helped by national associations and academics who validated its work.

C. BASES AND PRINCIPLES UNDERLYING THE EUROPEAN SCALE

9. A single scale must be based on ideas which everyone accepts. These ideas were set out at the First European Traffic Law Conference of June 2000 in Trier (“Trier I”), an initiative of Willi Rothley, Vice-Chairman of the European Parliament’s Legal Affairs Committee.

Doctors impute symptoms to causes, provide objective opinions and quantify, without exceeding the limits of their own specific areas of competence, in the full knowledge that the complexity of the human being cannot always fit adequately into the framework defined by lawyers.

10. The job of the medical assessor is on the one hand to quantify impairments of the human person which can be identified and/or explained in medical terms, and on the other hand to give a specialist opinion on a set list of any types of individual prejudice suffered.
11. Assessment looks at disabilities (impairments of physical and/or mental integrity) which are medically identifiable and thus measurable.

* European Confederation of Bodily Injury Assessment and Compensation Experts.

The assessment of purely subjective disabilities which can be explained medically (these are plausible but not identifiable and so not measurable) can only be reproducible if it uses one and the same rating: we have to have an objective benchmark before we can make changes to it.

12. Assessment requires a unit and a system. In order to avoid excessively radical changes to the medico-legal conventions in use by European experts, it was decided to use a percentage-based system.

The consensus at Trier I was that disability should be defined as follows:

'the definitive reduction of physical and/or mental potential which can be identified or explained medically; together with the pain and mental suffering known by the doctor to be a normal concomitant of the sequela plus the everyday consequences which commonly and objectively accompany that sequela.'

The disability rating is:

'the degree of difficulty, measured against a theoretical maximum of 100%, experienced by any subject with sequelae thus quantified in performing the customary movements and actions of everyday non-occupational living thus the degree of his "personal disability".'

The percentage disability:

'is not a unit of measurement but a unit of assessment, the result of combining measurements of a range of phenomena, using a range of instruments and so expressed in a range of units, with an intuitive opinion prompted by experience and the art of evaluating imponderable factors.'

13. So the setting of scales does not preclude a degree of personalisation. The doctor explains the implications of the sequelae for everyday living and then gives a rating. This rating not only quantifies the definitive injuries but incorporates the various parameters used in arriving at the percentage figure (which is a composite unit); so it tacitly includes a 'non-measurable and perhaps essential' portion which reflects the specific individuality of the person reported on, as assessed by the expert.
14. Where a pre-existing pathological condition has been changed by the accident being assessed, it is vital that the rating, which in this case has only a relative value, should be complemented by a description and explanation. In an amputee who is properly fitted with a leg prosthesis and becomes paraplegic as a result of the accident in question, the damage is not simply the rating *after* the victim became paraplegic minus the rating *before* he became paraplegic: the loss is the difference in terms of everyday living, a difference which must be described.
15. Many post-traumatic situations have serious repercussions on everyday living: so the rating of 100% does not mean the loss of all the functions of the individual person. Where a rating has been set, the residual capacity is certainly not the difference between 100% and this rating: it is far greater.
16. In addition to disability, certain prejudice specific to the individual concerned sometimes has to be acknowledged: the spoiling of a person's looks or sexual function (reproduction excluded), exceptional pain, impaired ability or inability to continue specific sports or leisure activities.

Other types of prejudice are sometimes invoked in a claim: these are artificial, a duplication of disability, or do not require any form of medical assessment.

These personal damages are not covered by this Scale, which makes no reference to them.

17. The post-traumatic experience of the injured person is merely – conditioned largely by his basic temperament – the way in which he reacts to an injury. If that experience is pathological, it is taken into account in the indications for treatment and in the disability rating. If it is not, it is neither

proven, nor identifiable, nor measurable: it is not 'medical', and the doctor can make no specific judgment on it.

18. Some ratings in the proposed Scale (loss of an eye, or one kidney, etc.) assume that any future deterioration in the remaining paired organ may be taken into account later, even though there is no obvious likelihood of such deterioration at the time the claim is processed. Likewise, no endoprosthesis lasts for ever. The law thus needs to provide either for reserves for the future or for a procedure to deal with any worsening in a victim's health status, something which only a few countries provide at the present time.

It is not possible to force human anatomy and physiology or materials resistance to comply with the wishes of the law and lawyers, but it should be possible to tailor legislative texts to realities which are inescapable.

D. METHOD USED IN DEVISING THE EUROPEAN SCALE

19. The fundamental principle adopted is that the same organs, functions and defined impairments of these functions should have the same attributed value in each country. These values, these guide ratings, form the basis of the European Scale.
20. It would be unreasonable to try to draw up a ranking of the value of organs and functions: that would be a purely empirical venture. It is possible, however, to rank the different parts of an organ and functional impairments by studying their objective repercussions on everyday living.

Observation tells us that damage progresses in fits and starts and not in line with any mathematical logic. So a scale is only valid if it draws on observation and measurement.

The guide ratings have thus been determined by observing and measuring, with a view to ascertaining the characteristics of a sequela and then quantifying it, by means of a rating, in terms of the repercussions it has on the routine activities of everyday living. This method of identifying functional disability can be readily employed by experts who do not as yet use the scale-based system, without modifying the customary medico-legal approach of those who do.

Values have thus been defined for amputations, total loss of function (e.g. ankylosis of a joint), and ranges of values for a number of partial losses of function. The corresponding ratings were set taking account of the customary values currently accepted in the various countries, following a debate which compared other post-traumatic sequelae of equivalent severity.

21. Partial sequelae have to be assessed in terms of the deficit observed, taking account of the rating for total loss.
22. Some impairments, notably in the sexual sphere (bilateral mastectomy, amputation of the penis), have ratings which might seem on the high side. But these ratings reflect the sociocultural attitudes of Europe which assessment must necessarily take into account.
23. It was essential to maintain internal 'vertical' consistency in each function considered, but also 'horizontal' consistency, comparing for equal ratings the clinical situations and their translation in everyday life, in order to avoid excessive disparities.

E. THE WAY FORWARD

24. A European Observatory for the Scale made up in part of members of CEREDOC will continuously revise the Scale taking into account comments, justifiable criticisms, problems in its use, methods of appraisal, and advances in our knowledge.

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